

WORLD ENERGY DATA SYSTEM



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VOLUME VII NUCLEAR FACILITY PROFILES AG-CH

OFFICE OF PROGRAM MANAGEMENT SUPPORT

ARGONNE NATIONAL LABORATORY

ARGONNE, ILLINOIS 60439

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WORLD ENERGY DATA SYSTEM
WENDS

VOLUME VII
NUCLEAR FACILITY PROFILES
AG-CH

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Argonne, Illinois 60439

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VOLUME VII
WENDS NUCLEAR FACILITY PROFILES
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THE WORLD ENERGY DATA SYSTEM

The World Energy Data System (WENDS) is a managerial level information bank containing organized data on those countries and international organizations that may have critical impact on the world energy scene. The system was developed by the Office of Program Management Support at Argonne National Laboratory for the Office of International Affairs of the Department of Energy (DOE). The Office of International Affairs also provided funds for the collection of the following information:

- Country data which provides general background information on the economy, government, and energy orientation.
- Similar compilations of information concerning energy-related international organizations.
- Summaries of energy-related international agreements.

Nuclear fission information was collected for the Plans and Analysis Division, Office of Nuclear Energy Programs, DOE. It includes the following:

- Nuclear facility profiles which provide resumes of facts concerning specific installations.
- Nuclear program summaries, that is, overviews of the fission R&D programs in selected countries.

All the WENDS data contains references to enable verification and expansion of the information. Since all data sources are non-classified, complete information is not always available. The Office of Program Management Support at Argonne welcomes any information that will complete these synopses in future publications. Please address comments to:

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This compendium of international energy-related information was compiled from a computerized database and is now available in a series of volumes. The total set of information is as follows:

<u>Volume</u>	<u>Title</u>	<u>Contents</u>
I	COUNTRY DATA Afghanistan, Algeria, Argentina, Australia, Austria, Bangladesh, Belgium, Bolivia, Brazil, Burma, Canada, China, Colombia	Review of background information for each country listed.
II	COUNTRY DATA Czechoslovakia, Denmark, Egypt, Finland, France, Germany (East), Germany (West), Greece, Guinea, India, Indonesia, Iran, Italy, Japan, Korea (South)	
III	COUNTRY DATA Libya, Luxembourg, Malaysia, Mexico, Netherlands, New Zealand, Niger, Nigeria, Norway, Pakistan, Peru, Philippines, Poland, Portugal	
IV	COUNTRY DATA Senegal, South Africa, Soviet Union, Spain, Sweden, Switzerland, Taiwan, Tanzania, Thailand, Turkey, United Kingdom, United States, Upper Volta, Venezuela, Yugoslavia	
V	INTERNATIONAL ORGANIZATION DATA Asian Development Bank, European Economic Community, Inter-American Development Bank, International Atomic Energy Agency, International Energy Agency, Nuclear Energy Agency, United Nations, World Bank	Review of background information for each international organization listed.

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|------|--|--|
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Italy, Japan, Peru,
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Taiwan, United Kingdom,
Soviet Union, Venezuela | Overviews of fission
R&D programs in 19
foreign countries. |

INTRODUCTION TO NUCLEAR FACILITY PROFILES

ORIENTATION

In this compendium each profile of a nuclear facility is a capsule summary of pertinent facts regarding that particular installation. The facilities described include the entire fuel cycle in the broadest sense, encompassing resource recovery through waste management. Power plants and all U.S. facilities have been excluded from this initial effort due to time and cost limitations.

To facilitate comparison the profiles have been recorded in a standard format. Because of the breadth of the undertaking some data fields do not apply to the establishment under discussion and accordingly are blank.

ORGANIZATION

The set of nuclear facility profiles occupies four volumes; the profiles are ordered by country name, and then by facility code. The list of countries with known nuclear facilities is in Table 1. It also includes the two-character State Department tags code, which is used to aggregate the nuclear facilities for each country in this publication. The nuclear facility code is obtained from the Advanced Nuclear Materials Information System. This code is composed of four capitalized characters (e.g., RIDJ) and appears at the extreme right side of the fifth line of each profile.

INDEXES

Each nuclear facility profile volume contains two complete indexes to the information. The first index aggregates the facilities alphabetically by country. It is further organized by category of facility, and then by the four-character facility code. It provides a quick summary of the nuclear energy capability or interest in each country and also an identifier, the facility code, which can be used to access the information contained in the profile.

The second index is ordered primarily by type or category of installation. Within this grouping, the profiles are listed alphabetically by country and by facility code. This index enables a worldwide comparison of nuclear energy-related activities.

The categories under discussion relate to general activities, such as mining, enrichment, and fuel reprocessing. The category and activity are described in the heading of each profile; their relationship is defined in Table 2.

Profile Contents

Each profile contains the following items:

Country code	Latitude
Activity	Longitude
Category	Technology source
Initials of researcher	Owner/Operator
Date of research	Supply source
Facility name	Safeguards
Location of installation	Product/Use
Facility type	Fuel storage capacity
Capacity	Process
Status	Schedule
Year related to status	Remarks
Facility code	References

Most of the data items have been discussed or are self-evident in meaning. Note that each profile is supported by references, in which any conflicting reference information is noted. Space limitations of the general purpose format necessitated abbreviations which are defined in three tables: Table 3 lists the abbreviations for facility types; Table 4 explains the capacity units; and Table 5 contains the status codes.

TABLE 1. Countries and State Department Tags Codes

ALGERIA	AG	JAPAN	JA
ARGENTINA	AR	KOREA (SOUTH)	KS
AUSTRALIA	AS	MADAGASCAR	MA
AUSTRIA	AU	MEXICO	MX
BELGIUM	BE	NAMIBIA	WA
BOLIVIA	BL	NETHERLANDS	NL
BRAZIL	BR	NIGER	NG
BULGARIA	BU	NORWAY	NO
CANADA	CA	PAKISTAN	PK
CENTRAL AFRICAN REPUBLIC	CT	PERU	PE
CHINA	CH	PHILIPPINES	RP
COLOMBIA	CO	POLAND	PL
CZECHOSLOVAKIA	CZ	PORTUGAL	PO
DENMARK	DA	PUERTO RICO	RQ
EGYPT	EG	ROMANIA	RO
FINLAND	FI	SOUTH AFRICA	SF
FRANCE	FR	SOVIET UNION	UR
GABON	GB	SPAIN	SP
GERMANY (EAST)	GE	SWEDEN	SW
GERMANY (WEST)	GW	SWITZERLAND	SZ
GREECE	GR	TAIWAN	TW
GREENLAND	GL	THAILAND	TH
HUNGARY	HU	TURKEY	TU
INDIA	IN	UNITED KINGDOM	UK
INDONESIA	ID	VENEZUELA	VE
IRAN	IR	VIETNAM, NORTH	VN
IRELAND	EI	YUGOSLAVIA	YO
ISRAEL	IS	ZAIRE	CG
ITALY	IT	ZAMBIA	ZA

TABLE 2. General Activities and Corresponding Categories

Resource Recovery

Mines

Mills

Conversion Plants

Enrichment Plant

Enrichment Plants

Fuel Fabrication

Heavy Water Production

Fuel Fabrication Plants

Research and Test Reactor

Research and Test Reactors

Spent Fuel Processing

Fuel Reprocessing Facilities

Separate Fuel Storage Facilities

Waste Management

Waste Disposal Facilities

TABLE 3. Facility Type Abbreviations

MINES

URAN - Uranium
 THOR - Thorium
 UTh - Uranium and Thorium

MILLS

URAN - Uranium
 THOR - Thorium
 UTh - Uranium and Thorium

CONVERSION PLANTS

UO2 - Conversion to Uranium Dioxide
 UF6 - Conversion to Uranium Hexafluoride
 UF4 - Conversion to Uranium Tetrafluoride

ENRICHMENT PLANTS

DIFF - Gaseous Diffusion
 CENT - Gaseous Centrifuge
 LASR - Laser Isotope Separation
 STAT - Stationary Wall Centrifuge
 CHEM - Chemical Exchange
 JET - Becker Jet-Nozzle

FUEL FABRICATION PLANTS

UO - Uranium Oxide
 UM - Uranium Metal
 UPuO - Uranium-Plutonium Mixed-Oxide
 FB - Fast Breeder
 UC - Uranium Carbide
 U3O8 - Yellowcake

RESEARCH AND TEST REACTORS

TANK - Tank-type
 TK-L - Tank-type, light water moderated
 TK-H - Tank-type, heavy water moderated
 POOL - Pool type
 OMRR - Organic moderated research reactor
 GMRR - Graphite moderated research reactor
 FNRR - Fast neutron research reactor
 SHRR - Solid homogeneous research reactor
 LHRR - Liquid homogeneous research reactor
 ARGO - Argonaut-type research reactor

TABLE 3 continued. Facility Type Abbreviations

FUEL REPROCESSING FACILITIES

FB - Fast Breeder
UO - Uranium Oxide
UM - Uranium Metal
UThO - Uranium-Thorium Mixed-Oxide
HTGR - High Temperature Graphite Reactor

SEPARATE FUEL STORAGE FACILITIES

ROCK - Hard-rock formations
SURF - Surface
HOLE - Near-surface Hole
SALT - Salt deposit
POOL - Pool-type

WASTE DISPOSAL FACILITIES

PREP - Waste Preparation
DISP - Waste Disposal

TABLE 4. Capacity Units of Measurement

kg/d	kilograms/day
kg/h	kilograms/hour
KSWU	1000 tonnes of separative work units (yearly)
KWt	1000 watts thermal (yearly)
l/d	liters/day
l/h	liters/hour
MWt	1 million watts thermal (yearly)
m ³ /h	cubic meters/hour
te	metric ton (tonne)
Wt	Watts thermal

TABLE 5. Status Codes

R&D	Research and development operation
Explor	Mine under exploration
Plan	Planned facility
Constr	Facility under construction
Oper	Facility in operation
Inactv	Facility inactive
(blank)	Status unknown

NFP INDEX BY COUNTRY

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
ALGERIA							
CATEGORY-MINES (URANIUM & THORIUM)							
		Tamanrasset	URAN		Explor	82	RAGA
		Timgaouine/Abankor	URAN		Explor		RAGC
ARGENTINA							
CATEGORY-MINES (URANIUM & THORIUM)							
		Los Gigantes	URAN		Explor		RANA
		Comechingones	URAN		Explor		RANB
		Los Chihvidos	URAN		Explor		RANC
		Sierra Cavdrada	URAN		Explor		RAND
		Los Adobes	URAN	50 te/y	Plan		RANE
		Don Otto	URAN	30 te/y	Oper	83	RARQ
		Sierra Pintada	URAN	600 te/y	Constr	83	RARR
		Malargue	URAN	30 te/y	Oper		RARS
		Sierra de Pichinan	URAN		Explor		RART
		Tonco-Amblayo	URAN		Explor		RARW
		Conquin	URAN		Explor		RARX
		Sano Gasta					RARY
		Guandacol	URAN		Explor		RARZ
CATEGORY-HEAVY WATER PRODUCTION							
		Buenos Aires			Plan	84	RARF
CATEGORY-FUEL FABRICATION PLANTS							
		Constituyentes Pilot	UO	50 te/yr	Oper	77	RARA
CATEGORY-RESEARCH AND TEST REACTORS							
	RA-0	Cordoba			Oper	68	RARJ
	RA-1	Buenos Aires	TANK	.15 Mwt	Oper	58	RARK
	RA-2	Buenos Aires			Oper	58	RARL
	RA-3	Buenos Aires	TANK	5 Mwt	Oper	67	RARM
	RA-4	Rosario	SHRR		Oper	66	RARN
	RA-5		FNRR		Constr	75	RARV
CATEGORY-FUEL REPROCESSING FACILITIES							
		Ezeiza Atomic Centre	UM	(small)	Oper	77	RARG
AUSTRALIA							
CATEGORY-MINES (URANIUM & THORIUM)							
		Maureen	URAN		Explor		RASA
		Ben Lomond	URAN		Explor		RASB
		Ngalia Basin	URAN		Explor		RASC
		Beverley	URAN		Explor		RASD
		Radium Hill	URAN		Inactv	61	RASF

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NFP INDEX BY COUNTRY

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
AUSTRALIA (CONT.)							
CATEGORY-MINES (URANIUM & THORIUM) (CONT.)							
		Flinders Range	URAN		Explor		RASJ
	Lake Way	Wiluna			Explor		RASK
	Olympic Dam		URAN		Explor		RASL
	Honeymoon	Honeymoon	URAN		Explor		RASM
		Yeelirrie	URAN	2300te/y	Plan	84	RAUL
	Jabirv	Ranger	URAN	3000te/y	Plan	81	RAUM
		Alligator Rivers	URAN		Explor		RAUP
		Koongarra		1500te/y	Plan		RAUQ
		Nabarlek	URAN	900 te/y	Plan	81	RAUR
		Jabiluka	URAN	2500te/y	Plan	83	RAUT
		Westmoreland	URAN		Explor		RAUU
	Mary Kathleen	Mt. Isa	URAN	700 te/y	Oper	56	RAUV
		Rum Jungle	URAN	200 te/y	Inactv	71	RAUX
	South Alligator	Northern Territory	URAN		Inactv	62	RAUY
	El Sherana	El Sharana	UPAN		Inactv	65	RAUZ
CATEGORY-MILLS							
	Jabiru	Ranger	URAN	3000te/y	Plan	82	RAUN
		Nabarlek	URAN	900 te/y	Plan	81	RAUS
	Mary Kathleen	Mt. Isa	URAN	700 te/y	Oper	56	RAUW
CATEGORY-ENRICHMENT PLANTS							
	Lucas Heights	Lucas Heights	CENT		Oper	65	RASE
			LASR		R&D		RASH
CATEGORY-RESEARCH & TEST REACTORS							
	High Flux Australian	Sutherland, New S.W.	TANK	10 MWt	Oper	58	RAUE
	Moata Reactor	Lucas Heights	ARGO	.01 MWt	Oper	61	RAUH
AUSTRIA							
CATEGORY-MINES (URANIUM & THORIUM)							
		Forstau	URAN		Explor		RATP
		Tweng	URAN		Explor		RATQ
CATEGORY-RESEARCH AND TEST REACTORS							
	ASTRA Adapted Swim.	See remarks	POOL	Remarks	Oper	60	RATE
	Sar-Graz	Graz	ARGO	.001 MWt	Oper	65	RATH
	Triga Mark II	Vienna	SHRR	25 MWt	Oper	62	RATK
BELGIUM							
CATEGORY-FUEL FABRICATION PLANTS							
	Dessel Pu Fuel Prod.	Dessel	UPuO	35 te/yr	Oper	73	RBEH
	FBFC	Dessel	UO	200 te	Oper	59	RBER
	Plutonium Lab.	Mol	UPuO	(small)	Oper	60	RBEZ

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NFP INDEX BY COUNTRY

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
BELGIUM (CONT.)							
CATEGORY-RESEARCH AND TEST REACTORS							
	BR-02	Mol	TK-L	500wt	Oper	59	RBEE
	BR-1	Mol		4 MWt	Oper	56	RBEF
	Belgian Reactor BR-2	Mol	TK-L	100 MWt	Oper	60	RBEG
	BR-3/VN	Mol	TANK	40.9 MWt		65	RBEJ
	Thetis	Ghent		41 MWt	Oper	67	RBET
	VENUS	Mol	TANK	500wt	Oper	64	RBEX
	BR-3	Mol	PWR	10.5 MWe	Oper	72	RBGE
CATEGORY-FUEL REPROCESSING FACILITIES							
	Eurochemic	Mol	UMUC	60 te/yr	Inactv	66	RBEQ
CATEGORY-WASTE DISPOSAL FACILITIES							
	Eurobitum	Mol	PREP	650 m3	Oper	77	RBGF
	PAMELA II	Mol	PREP	40 l/hr	Plan	81	RBGG
		Mol	DISP	10000 m3	Plan	79	RBGH
		Mol	PREP	80 l/hr	Oper	64	RBGJ
	EUROSTORAGE	Mol	DISP		Oper		RBGK
		Mol	PREP	150 Kg/h	Oper	75	RBGL
		Atlantic Ocean	DISP	2000 te	Oper		RBGM
	Eurowatt	Mol	PREP	1000 l/d	Constr		RBGN
		Mol	PREP	200 kg/h	Inactv	60	RBGP
		Mol	PREP	10 Kg/hr	Oper	70	RBGR
BOLIVIA							
CATEGORY-MINES (URANIUM & THORIUM)							
		Cotaje	URAN		Plan	80	RBOC
BRAZIL							
CATEGORY-MINES (URANIUM & THORIUM)							
		Campos Belos	URAN		Explor		RBRT
		Figueira	URAN		Explor		RBZL
		Pocos de Caldas	URAN	500 te/y	Constr	79	RBZG
		Pocos de Caldas	URAN	500 te/y	Constr	79	RBZH
		Olinda	URAN		Explor		RBZJ
		Araxa	URAN		Explor		RBZK
		Amorinopolis	URAN		Explor		RBZL
		Quadilatero	URAN		Explor		RBZM
		Itabapoana	THOR		Oper		RBZN
		Cumuruxatiba	THOR		Oper		RBZP
CATEGORY-ENRICHMENT PLANTS							
	Nuclei	Sepetiba	JET	180 KSWU	Plan	82	RBRA
		Sepetiba	JET	5000 K	Plan		RBZA

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NFP INDEX BY COUNTRY

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
BRAZIL (CONT.)							
CATEGORY-FUEL FABRICATION PLANTS							
	Inst Energie Atomica	Sao Paulo	U308	10 te/yr	Oper		RBR5
		Sepetiba	UO	50 te/yr	Constr	78	RBZE
CATEGORY-RESEARCH AND TEST REACTORS							
	IEAR-1	Sao Paulo, Brazil	POOL	5 Mwt		58	RBRR
	RIEN-1	Rio de Janeiro	ARGO	.01 Mwt	Oper	65	RBRW
	Triga-Brazil	Belo Horizonte	SHRR	30 Kwt	Oper	59	RBRV
CATEGORY-FUEL REPROCESSING FACILITIES							
		Sepetiba	UO	5 kg/day	Plan	86	RBRB
BULGARIA							
CATEGORY-MINES (URANIUM & THORIUM)							
	Buhovo	Sofia			Oper		RBLI
CATEGORY-RESEARCH AND TEST REACTORS							
	IRT-Sofia	Sofia	POOL		Oper	61	RBLE
CANADA							
CATEGORY-MINES (URANIUM & THORIUM)							
	Cluff Lake	Cluff Lake	URAN	1500te/y	Constr	79	RDCG
	Birch Island	Clearwater	URAN	110 te/y	Constr	80	RDCK
	Beaverlodge	Beaverlodge	URAN	460 te/y	Oper	53	RDCL
	Key Lake	La Ronge	URAN	2300te/y	Plan	83	RDCN
	Rabbit Lake	Rabbit Lake		1730te/y	Oper	75	RDCP
	Baker Lake	Baker Lake	URAN		Explor		RDCR
	Preston	Elliot Lake	URAN		Inactv	61	RDCS
	Rio Algon	Elliot Lake	URAN	1900te/y	Oper	68	RDCU
	Agnew Lake	Sudbury	URAN	270 te/y	Oper	77	RDCW
	James Bay	James Bay	URAN		Explor		RDCZ
	Wollaston Lake	Wollaston Lake	URAN		Explor		RDDA
	Madawaska	Bancroft	URAN	320 te/y	Oper	76	RDDC
	Kitts-Michelin	Makkovik	URAN		Explor	83	RDDE
	Johan Beetz	Quebec	URAN		Explor		RDJH
		Port Radium	URAN		Inactv	60	RDJU
	Rayrock	Lake Marion	URAN		Inactv	57	RDJV
		Great Slave Lake	URAN		Explor		RDJW
		St. Armand	URAN		Explor		RDJX
		Otish Mountains	URAN		Explor		RDJY
		Mont Laurier	URAN		Explor		RDJZ
	Charlebois Lake	Charlebois Lake	URAN		Explor		RDKA
		St. Germaine Lake					RDKB
		Tyee Lake					RDKC

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COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
CANADA (CONT.)							
CATEGORY-MINES (URANIUM & THORIUM) (CONT.)							
		Mazenod Lake					RDKD
		Dudderidge Lake					RDKE
		Thunder Bay					RDKF
		Cape Dorset					RDKG
		Ungara					RDKH
		Jourdan Lake					RDKJ
		Sakami Lake					RDKK
		Uranium City					RDKL
		Lake Athabaska					RDKM
		Blind River					RDKN
		Cobequid Mountain					RDKP
		Churchill					RDKQ
		Dismal Lake					RDKR
		Fond du Lac					RDKS
	Denison	Elliot Lake	URAN	1900te/y	Oper	57	RDKZ
CATEGORY-MILLS							
	Beaverlodge	Beaverlodge		460 te/y	Oper	53	RDCM
	Rabbit Lake	Rabbit Lake		1730te/y	Oper	75	RDCQ
	Denison	Elliot Lake	URAN	1900te/y	Oper	57	RDCT
	Rio Algon	Elliot Lake	URAN	1900te/y	Oper	68	RDCV
	Agnew Lake	Sudbury	URAN	270 te/y	Oper	77	RDCX
	Madawaska	Bancroft	URAN	320 te/y	Oper	76	RDDD
CATEGORY-CONVERSION PLANTS							
	Eldorado Nuclear	Port Hope	UF6	4000 te	Oper	70	RDAY
	Eldorado Nuclear	Port Granby	UF6	10000 te	Plan	81	RDDN
CATEGORY-HEAVY WATER PRODUCTION							
	Port Hawkesbury	Port Hawkesbury		400te/y	Oper	70	RDFA
	Glace Bay	Glace Bay		400 te/y	Oper	76	RDJP
	Bruce A	Douglas Point		800 te/y	Oper	73	RDJQ
	Bruce B	Douglas Point		800 te/y	Constr	78	RDJR
	Bruce C	Douglas Point		800 te/y	Plan	80	RDJS
	Bruce D	Douglas Point		800 te/y	Plan	79	RDJT
	La Prade	La Prade		800 te/y	Constr	79	RDKU
		Trail		6 te/y	Inactv		RDKV
CATEGORY-FUEL FABRICATION PLANTS							
	Canadian Gen Electr.	Peterborough	UO		Oper		RDAT
	Canadian Gen Electr.	Toronto	UO		Oper		RDAU
	Westinghouse	Port Hope	UO		Oper		RDCD
	Chalk River Nuclear	Chalk River	UPuO (small)		Inactv	76	RDDB
	Westinghouse	Varenes	UO		Oper		RDXH
CATEGORY-RESEARCH & TEST REACTORS							
	McMaster Nuclear	Hamilton, Ontario,	POOL 2 MWt		Oper	59	RDBF
	NRU Reactor	Chalk River, Ontario	TK-H 110 MWt		Oper	58	RDBJ

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NFP INDEX BY COUNTRY

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
CANADA (CONT.)							
CATEGORY-RESEARCH & TEST REACTORS (CONT.)							
	NRX	Chalk River, Ontario	TK-H	33 MWt	Oper	47	RDBK
	NRX Reactor	Chalk River, Ontario	TK-H	40 MWt	Oper	48	RDBL
	Pool Test Reactor	Chalk River, Ontario	POOL	10 Wt	Oper	57	RDBZ
	Slowpoke-2	Ottawa, Ontario	POOL	.021 MWt	Oper	71	RDCA
	Slowpoke-1	Toronto, Ontario	POOL	.021 MWt	Oper	70	RDCB
	WR-1	Pinawa, Manitoba	TK-H	40 MWt	Oper	65	RDCE
	ZED-2	Chalk River, Ontario	TK-H	200 Wt	Oper	60	RDCH
	ZEEP	Chalk River, Ontario	TK-H	Remarks	Remark	45	RDCJ
CATEGORY-FUEL REPROCESSING FACILITIES							
	Chalk River Nucl Lab	Chalk River	UO	(small)	Inactv		RDAD
CATEGORY-SEPARATE FUEL STORAGE FACILITIES							
	Whiteshell	Whiteshell	SURF		Oper		RDJJ
	Chalk River Nuclear	Chalk River	HOLE		Oper		RDJL
	Pickering Nucl Power	Pickering	POOL		Oper		RDJM
	Bruce Nuclear Power	Tiverton	POOL		Oper		RDJN
CATEGORY-WASTE DISPOSAL FACILITIES							
		White Lake	ROCK		Oper		RDJK
	Chalk R Nucl Lab	Chalk River	PREP	200 kg/h	Inactv	60	RDKW
	RWVRF	Tiverton	PREP		Oper	77	RDKX
	Chalk R Nucl Lab	Chalk River	PREP		Oper		RDKY
CENTRAL AFRICAN REPUBLIC							
CATEGORY-MINES (URANIUM & THORIUM)							
		Bakouma	URAN	1000te/y	Plan	81	RCAA
CHINA							
CATEGORY-MINES (URANIUM & THORIUM)							
		Kuetchou	UTh		Oper		RPCD
		Tsinghai	UTh		Oper		RPCE
		Szechwan	UTh		Oper		RPCF
		Sinkiang	UTh		Oper		RPCG
		Chuannan	URAN		Oper		RPCJ
		Chuchou	URAN		Oper		RPCK
		Chushan	URAN		Oper		RPCL
	Hsia Chuang	Weiyuan	URAN		Oper		RPCM
CATEGORY-ENRICHMENT PLANTS							
	China 1	Lanchou	DIFF	180 KSWU	Oper	63	RPCB
			LASR		R&D		RPCH

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NFP INDEX BY COUNTRY

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
COLOMBIA							
CATEGORY-RESEARCH & TEST REACTORS							
	Instituto De Asuntos	Bogota	POOL	20 KwT	Oper	65	RCOB
CZECHOSLOVAKIA							
CATEGORY-MINES (URANIUM & THORIUM)							
	Pribram	Jachymov Pribram	URAN URAN		Oper	54	RCKE RCZN
CATEGORY-FUEL FABRICATION PLANTS							
	Nuclear Fuel Inst.	Prague			Oper		RCKF
CATEGORY-RESEARCH AND TEST REACTORS							
	HWGCR (KS-150)	Bohunice, Slovakia		590 MWt	Oper	65	RCKD
	WWR-C Prague	Rez	TK-L	2 MWt	Oper	57	RCZL
CATEGORY-WASTE DISPOSAL FACILITIES							
	NRI-Rez	Prague	PREP	3.6 m3/h	Oper	61	RCKG
DENMARK							
CATEGORY-FUEL FABRICATION PLANTS							
	Riso Research Est.	Roskilde Elsinore			Oper Oper		REN REN
CATEGORY-RESEARCH AND TEST REACTORS							
	DR-1	Roskilde	LHRR	500Wt		57	RENG
	DR-2	Roskilde	POOL	5 MWt	Oper	58	RENJ
	DR-3	Copenhagen	TK-H	10 MWt	Oper	59	RENK
EGYPT							
CATEGORY-RESEARCH & TEST REACTORS							
	UAR WWR-C Reactor	Inshas	TK-L	2 MWt	Oper	61	RVAE
FINLAND							
CATEGORY-MINES (URANIUM & THORIUM)							
		Joensuu	URAN		Inactv	61	REFF
CATEGORY-RESEARCH AND TEST REACTORS							
	FIR-1	Helsinki		250 MWt	Oper	62	REFA
	Fir-1	Otaniemi	SHRR	Remarks	Oper	62	REFB

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NFP INDEX BY COUNTRY

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
FRANCE							
CATEGORY-MINES (URANIUM & THORIUM)							
		Vendee	URAN		Oper		RFEW
		La Crouzille	URAN	200 te/y	Oper	50	RFEZ
		St. Priest	URAN				RFFA
		Lodeve	URAN	500 te/y	Oper	78	RFFK
		Roven	URAN	100 te/y	Plan	81	RFGQ
		Langogne	URAN	135 te/y	Oper	77	RFGR
		St. Pierre du Cantal	URAN	100 te/y	Oper	78	RFGU
CATEGORY-MILLS							
		L'Ecarpier	URAN	700 te/y	Oper	77	RFEV
		Bessines-sur-Gartemp	URAN	1500te/y	Oper	77	RFEY
		St. Priest	URAN	500 te/y	Oper	77	RFFB
		Langogne	URAN	135 te/y	Oper	77	RFGS
		Lodeve	URAN	1000te/y	Constr	80	RFGT
CATEGORY-CONVERSION PLANTS							
	Conversion Facility,	Pierrelatte	UF6	8000 te	Oper	77	RFFC
	Malvesi Refining Fac	Malvesi	UF4		Oper		RFFL
CATEGORY-ENRICHMENT PLANTS							
	Enrichment Facility	Pierrelatte	DIFF	500 KSWU	Oper	67	RFAA
	Eurodif 1	Tricastin	DIFF	10800 K	Constr	81	RFBQ
	Eurodif 2 (Coredif)		DIFF	5000 K	Plan	85	RFBZ
			CHEM	50-100 K	Plan	85	RFFZ
			LASR		R&D	60	RFGA
CATEGORY-HEAVY WATER PRODUCTION							
		Toulouse	D20	2 te/y	Inactv		RFGW
		Mazingarbe	D20	26 te/y	Inactv		RFGX
CATEGORY-FUEL FABRICATION PLANTS							
	FBFC	Romans	UO	300 te	Constr	78	RFFE
	Pu Workshops ATPu,	St-Paul-les-Durance	UPuO	10 te/yr	Oper		RFFF
	SICN	Veurey	FB		Oper		RFFM
	CERCA	Romans	UM	900 te	Oper		RFGZ
	SICN	Annecy	UM	1200 te	Oper		RFHA
CATEGORY-RESEARCH AND TEST REACTORS							
	Reactor Alecto	Saclay	LHRR	1 Wt	Inactv	64	RFAD
	Reactor Alize	Saclay	TK-L	1 Wt	Inactv	59	RFAE
	Aquilon	Sarclay, near Paris	TK-H	Remarks	Inactv	56	RFAH
	Azur	Cadarache	POOL	(small)	Oper	62	RFAK
	Cabri	Cadarache	POOL	Remarks	Oper	63	RFAZ
	Reactor Cesar	Cadarache	GMRR	10 Kwt	Oper	64	RFBA
	Reactor Zoe	Fontenay-Aux-Roses	TK-H	150 Kwt	Oper	48	RFBK
	Reactor EL-2	Saclay	TK-H	2 Mwt	Inactv	52	RFBL
	Reactor EL-3	Saclay	TK-H	20 Mwt	Oper	57	RFBM

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COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
FRANCE (CONT.)							
CATEGORY-RESEARCH & TEST REACTORS (CONT.)							
	Eole Reactor	Cadarache	TK-H	10KW max	Oper	65	RFBN
	Harmonie Reactor	Bouches-du-Rhone	FNRR	.002 Mwt	Oper	65	RFCC
	Isis Reactor	Saclay	POOL	.08 Kwt	Oper	66	RFCR
	Reactor Marius	Cadarache	GMRR	(small)	Oper	60	RFCW
	MASURCA	Cadarache	FNRR	1 Kwt	Oper	66	RFCX
	Reactor Melusine	Grenoble, Isere	POOL	8.0 Mwt	Oper	58	RFCY
	Reactor Minerve	Fontenay-Aux-Roses	POOL	100 Mwt	Oper	59	RFCZ
	Nereide Reactor	Fontenay-aux-Roses	POOL	.6 Mwt	Oper	60	FFDB
	Osiris Reactor	Saclay, Seine-et-Ois	TK-L	50 Mwt	Oper	66	RFDC
	Reactor Pegase	Cadarache	TK-L	30 Mwt	Oper	63	RFDH
	Peggy	Cadarache	TK-L	1 Kwt	Oper	61	RFDJ
	Proserpine	Saclay	LHRR	1 Wt	Oper	58	RFDM
	Rapsodie Reactor	Bouches-du Rhone	FNRR	41 Mwt	Oper	67	RFDR
	Reactor Siloe	Grenoble	POOL	Remarks	Oper	63	RFDV
	Reactor Siloette	Grenoble	POOL	.1 Mwt	Oper	64	RFDW
	Strasbourg-Cronenbg.	Strasbourg	ARGO	.1 Mwt	Oper	66	RFED
	Reactor Triton	Fontenay-Aux-Roses	POOL	100 Wt	Oper	59	RFEM
	Ulysse Reactor	Saclay	ARGO	.1 Mwt	Oper	61	RFEN
	Chaudiere	Cadarache		100 Mwt	Oper	75	RFGC
	High-Flux Reactor	Grenoble	TK-H	60 Mwt	Oper	71	RFGD
CATEGORY-FUEL REPROCESSING FACILITIES							
	UP-2	Cap de La Hague	UMUO	800 te	Oper	66	RFAU
	UP-3	Cap de La Hague	UO	1600 te	Plan	87	RFAV
	AT-1	Cap de La Hague	FB	200 kg	Oper	66	RFER
	UP-1	Marcoule	UM	1000 te	Oper	58	RFFJ
	SAP	Marcoule	FB	5 te/yr	Oper.		RFGB
CATEGORY-WASTE DISPOSAL FACILITIES							
	Saclay Nucl Res Cen	Seine-et-Oise	PREP		Oper		RFGE
		Cap de La Hague	DISP	1.3 Mbbl	Oper		RFGF
	VULCAIN	Marcoule	PREP		Oper		RFGG
	PIVER	Marcoule	PREP		Inactv	69	RFGH
	GULLIVER	Fontenay-aux-Roses	PREP		Inactv	63	RFGJ
	AVM	Marcoule	PREP	30 l/hr	Oper	78	RFGK
	AVH	Cap de La Hague	PREP	100 l/hr	Plan	82	RFGL
	Center of Nucl Study	Grenoble	PREP		Constr		RFGM
	Center of Nucl Study	Grenoble	PREP	30 kg/hr	Oper	61	RFGN
	Cadarache Nuclear	St. Paul-les-Durance	PREP		Oper	77	RFGP
	Fontenay-aux-Roses	Fontenay-aux-Roses	PREP	50 kg/hr	Oper	67	RFGY
		Strasbourg	PREP	15 kg/hr	Oper	70	RFHB
GABON							
CATEGORY-MINES (URANIUM & THORIUM)							
		Mikouloungou	URAN		Explor		RHBA
		Oklo	URAN		Oper	70	RHBB
		Mounana	URAN		Inactv		RHBC
		Boyindzi	URAN		Explor		RHBE
		Okelobondo	URAN		Explor		RHBF

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COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
GABON (CONT.)							
CATEGORY-MILLS							
		Mounana	URAN		Inactv		RHBD
GERMANY (EAST)							
CATEGORY-MINES (URANIUM & THORIUM)							
	Sorgesettendorf	Weringerode	URAN		Oper	50	REGU
		Thuringia	URAN		Oper		REGV
			URAN				REGW
CATEGORY-WASTE DISPOSAL FACILITIES							
		Bartensleben	DISP		Plan		REGT
GERMANY (WEST)							
CATEGORY-MINES (URANIUM & THORIUM)							
		Menzenschwand	URAN		Explor		RGFJ
		Mullenbach	URAN		Explor		RGGT
		Oberpfalzer	URAN		Explor		RGGU
		Saxony	URAN		Inactv		RGGV
CATEGORY-CONVERSION PLANTS							
	RBU-1	Hanau	UO2	1000 te	Oper	64	RGDF
CATEGORY-ENRICHMENT PLANTS							
	Karlsruhe Nuclear	Julich	CENT		Oper		RGFC
		Karlsruhe	JET	2 KSWU	Oper	67	RGFH
		Gronau	CENT	1000 K	Plan	85	RGFR
			LASR		R&D	71	RGFS
CATEGORY-HEAVY WATER PRODUCTION							
		Frankfurt	D20	6 te/y	Inactv		RGGS
CATEGORY-FUEL FABRICATION PLANTS							
	RBU-II	Grosswelzheim	UO	150 te	Oper	66	RGDG
	RBU-I	Hanau	UO	600 te	Oper	64	RGDH
		Lingen	UO		Constr	77	RGFB
	Alkem GmbH	Hanau	UPuO	50 te/yr	Oper	66	RGFE
	Hobeg	Hanau	UOUC		Oper	72	RGFK
CATEGORY-RESEARCH AND TEST REACTORS							
	AVP	KFA, Julich	GMRR	46 MWt	Oper	67	RGAF
	Adibka-1 Reactor	Julich	LHRR	10 Wt	Oper	67	RGAC
	AEG Nullenergie	Grosswelzheim	TK-L	100 Wt	Oper	67	RGAD
	ANEX	Geesthacht		0 MWt	Oper	64	RGAE
	BER	Berlin-Wannsee	LHRR	50 KwT	Oper	58	RGAH
	FMRB	Braunschweig	POOL	1 MWt	Oper	67	RGAV

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COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
GERMANY(WEST) (CONT.)							
CATEGORY-RESEARCH & TEST REACTORS (CONT.)							
	FR-2	Karlsruhe	ARGO	12 MWt	Oper	61	RGAW
	Rsch Reactor	Frankfurt/Main	LHRR	50 KWt		58	RGAX
	Rsch Reac Geesthacht	Geesthacht/Elbe	POOL	5 MWt	Oper	58	RGAY
	FRG-2	Geesthacht/Elbe	POOL	15 MWt	Oper	68	RGAZ
	Dido-Julich	Julich	TK-H	10 MWt	Oper	61	RGBB
	Rsch Reactor Muenchen	Garching	POOL	4 MWt	Oper	57	RGBC
	Triga-I-Hannover	Hannover		.25 MWt	Oper	72	RGBP
	React. Merlin-Julich	Julich, W. Germany	POOL	5 MWt	Oper	61	RGCP
	PR-10	Grosswelzheim					RGDD
	SAR-1	Garching	ARGO		Oper	59	RGDQ
	SNEAK	Leopoldshafen	FNRR	1KWt max	Oper	66	RGDR
	Stark	Karlsruhe	ARGO		Oper	64	RGDU
	SUR-Aachen	Aachen	SHRR	.1 Wt	Oper	66	RGDW
	SUR-Berlin	Berlin	SHRR	.1 Wt	Oper	63	RGDX
	SUR-Bremen	Bremen	SHRR	.1 Wt	Oper	67	RGDY
	SUR-Darmstadt	Darmstadt	SHRR	.1 Wt	Oper	63	RGDZ
	SUR-Hamburg	Hamburg	SHRR	.1 Wt	Oper	65	RGEA
	SUR-Karlsruhe	Karlsruhe	SHRR	.1 Wt	Oper	66	RGEB
	SUR-Kiel	Kiel	SHRR	.1 Wt	Oper	66	RGEC
	SUR-Stuttgart	Stuttgart	SHRR	.1 Wt	Oper	64	RGEF
	SUR-Ulm	Ulm	SHRR	.1 Wt	Oper	65	RGEG
	Triga-I-Heidelberg	Heidelberg	SHRR	.25 MWt	Oper	66	RGEM
	German Triga	Mainz, West Germany	SHRR	10 KWt	Oper	65	RGEN
	HDR	Grosswelzheim/Main		100 MWt		68	RGFQ
	CFG	Karlsruhe	SHRR	Max 100W	Oper	64	RGFT
	BER-2	Berlin	POOL	5 MWt	Oper	73	RGFX
	Kather	Julich			Oper	73	RGFY
	SUR-100	Furtwangen	SHRR		Oper	73	RGFZ
	AEG-PR-10	Unterfranken	ARGO	10 Wt	Oper	61	RGGA
	SUR-Hannover	Hannover	SHRR		Oper	61	RGGE
	Triga Conversion	Frankfurt	SHRR	1 MWt			RGGF
	WWR-5 (m)	Rosendorf	TANK	6 MWt			RGGG
CATEGORY-FUEL REPROCESSING FACILITIES							
	URG/KEWA		UO	1500 te	Plan	86	RGCC
	JUPITER	Julich	HTGR	2 kg/day	Oper	77	RGCF
	WAK	Karlsruhe	UOFB	40 te/yr	Oper	71	RGEW
	DWK	Gorleben	UO	1400 te	Plan	88	RGFU
CATEGORY-SEPARATE FUEL STORAGE FACILITIES							
		Ahaus	POOL	1500 te	Plan	83	RGGB
		Gorleben	POOL	4000 te	Plan		RGGC
CATEGORY-WASTE DISPOSAL FACILITIES							
	Asse Salt Mine	Remlingen	DISP	4 Mm3	Oper	67	RGGD
	KfK-1	Karlsruhe	PREP	2.5 te/d	Oper	77	RGGH
	KfK-2	Karlsruhe	PREP	15 kg	Oper	75	RGGJ
	FIPS-II	Julich	PREP	1 kg/hr	Oper	77	RGGK
	FIPS-I	Julich	PREP	1 kg/hr	Inactv	72	RGGL

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COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
GERMANY (WEST) (CONT.)							
CATEGORY-WASTE DISPOSAL FACILITIES (CONT.)							
	VERA	Karlsruhe	PREP		Inactv	70	RGGM
		Karlsruhe	PREP	30 l/hr	Oper	76	RGGN
GREECE							
CATEGORY-RESEARCH AND TEST REACTORS							
	GRR	Athens	POOL	1 Mwt		59	RHCE
GREENLAND							
CATEGORY-MINES (URANIUM & THORIUM)							
	Kvanefjeld	Ilimaussaq	URAN		Explor		RHLA
HUNGARY							
CATEGORY-MINES (URANIUM & THORIUM)							
		Pecs	URAN		Oper	55	RHUK
CATEGORY-RESEARCH AND TEST REACTORS							
	Hungarian WWR-C	Csillererc	TANK	2 Mwt	Oper	59	RHUF
INDIA							
CATEGORY-MINES (URANIUM & THORIUM)							
		Bhatin	URAN		Constr		RHEH
		Quilor	THOR	60 te/y	Oper		RHEJ
		Manavalakurichi	THOR	450 te/y	Oper		RHEK
		Narwapahar	URAN		Constr		RHIY
		Jaduguda	URAN		Oper	56	RHNA
CATEGORY-MILLS							
		Narwapahar	URAN		Constr		RHIZ
		Jaduguda	URAN		Oper	56	RHNB
CATEGORY-CONVERSION PLANTS							
	Nucl Fuel Complex	Hyderabad	UO2	124 te	Oper	71	RHIA
CATEGORY-HEAVY WATER PRODUCTION							
	Nangal	Nangal	D2O	14 te/y	Oper	62	RHNK
	Baroda Plant	Baroda	D2O	67.2te/y	Oper	76	RHNL
	Kota Plant	Kota	D2O	100 te/y	Constr	80	RHNM
	Tuticorin Plant	Tuticorin	D2O	71.3te/y	Constr	78	RHNN
	Talcher Plant	Talcher	D2O	62.7te/y	Constr	80	RHNP
	Nuclear Fuels	Hyderabad	UO	124 te	Oper	71	RHNQ

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COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
INDIA (CONT.)							
CATEGORY-RESEARCH AND TEST REACTORS							
	Kalpakkum PFR	Kalpakkam	FNRR	.03 Mwt	Plan		RHEB
	FBTR	Kalpakkam	FNRR	50 Mwt	Constr		RHEL
	Reactor Apsara	Trombay	POOL	1 Mwt	Oper	56	RHIF
	CIR	Trombay	TK-H	40 Mwt	Oper	60	RHIG
	Zerlina	Trombay	TANK	MAX100wt	Oper	61	RHIW
	Purnima	Trombay			Oper	72	RHNZ
CATEGORY-FUEL REPROCESSING FACILITIES							
	PREFRE	Kalpakkam	UO	50 te/yr	Plan	82	RHED
		Tarapur	UOUM	100 te	Oper	77	RHIC
		Trombay	UThO (small)		Oper		RHID
	Plutonium Plant	Trombay	UMUO	60 te/yr	Oper	65	RHIL
CATEGORY-WASTE DISPOSAL FACILITIES							
	Waste Immobilization	Tarapur	PREP	25 l/hr	Constr	79	RHEF
	BARC	Trombay	PREP	45 kg/hr	Oper	66	RHEM
INDONESIA							
CATEGORY-RESEARCH AND TEST REACTORS							
	Triga-Mark II	Bandung	SHRR	.25 Mwt	Oper	65	RHOE
IRAN							
CATEGORY-MINES (URANIUM & THORIUM)							
	Anarak		URAN		Explor		RORR
	Yazd		URAN		Explor		RORS
CATEGORY-RESEARCH AND TEST REACTORS							
	U of Teheran Rsch	Teheran	POOL	5 Mwt	Oper	67	RORM
	UTRR Conversion	Tehran	SHRR	10 Mwt	Constr		RORQ
IRELAND							
CATEGORY-MINES (URANIUM & THORIUM)							
	Leinster	Mt. Leinster	URAN		Explor		RHRF
ISRAEL							
CATEGORY-ENRICHMENT PLANTS							
	Weizmann Institute	Rehovot	LASR		R&D		RTSF

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COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
ISRAEL (CONT.)							
	CATEGORY-RESEARCH AND TEST REACTORS						
	IRR	Rehovath	POOL	5 MWt	Oper	59	RTSF
	IRR-2	Negev		26 MWt	Oper		RTSG
ITALY							
	CATEGORY-MINES (URANIUM - THORIUM)						
	Novazza	Val Rendena	URAN		Explor		RICP
		Valgoglio	URAN	110 te/y	Constr	80	RICQ
		Preit Valley	URAN		Explor		RIDM
		Latium	URAN		Explor		RIDN
		Lazio	URAN		Explor		RIDP
	CATEGORY-MILLS						
		Novazza	URAN	200 te/y	Constr	80	RIDG
	CATEGORY-CONVERSION PLANTS						
	Fabricazioni Nucl	Bosco Marengo	UO2	360 te	Plan		RICT
	CATEGORY-FUEL FABRICATION PLANTS						
	Fabricazioni	Bosco Marengo	UO	200 te	Oper	74	RIBM
		San Donato	UPuO	8 te/yr	Oper		RICR
	Casaccia Center,	Rome	UPuO	8 te/yr	Oper		RICX
	Combustibili	Rotondella	UM	30 te/yr	Oper	69	RICZ
	COREN	Saluggia	UO	60 te/yr	Oper	68	RIDH
	CATEGORY-RESEARCH AND TEST REACTORS						
	AGN-201-110	near Palermo	SHRR	.1 Wt	Oper	60	RIAD
	Avogadro RS-1	Saluggia	POOL	7 MWt	Inactv	60	RIAE
	CIRENE	Latina		128.5MWt			RIAG
	ECO	Ispra (Varese)	TK-H	1kWt max	Inactv	65	RIAK
	Essor reactor	Ispra (Varese)	TK-H	36.6 MWt	Oper	67	RIBK
	RTS-1	San Piero a Grado	POOL	5 MWt	Oper	65	RIBN
	Reactor Ispra-1	Ispra, Varese	TK-H	5 MWt	Inactv	59	RIBR
	ISPRA-2 (RANA)	Casaccia	POOL	Remarks	Oper	61	RICA
	RB-1	Montecuccolino	GMRR	10 Wt	Oper	62	RICB
	RB/2	Bologna	ARGO	10 KWt	Oper	63	RICC
	ROSPO	Roma	OMRR	(small)	Oper	63	RICE
	Triga-II Pavia	Pavia	SHRR	Remarks	Oper	65	RICK
	Triga Mark II	Rome	SHRR	1 MWt	Oper	59	RIDA
	CESNEF	Milan	LHRR	50 KWt	Oper	60	RIDD
	PEC	Lake Brasimore	FNRR	140 MWt	Constr	78	RIDD
	RB-3	Univ. of Bologna	TK-H		Oper	71	RIDE
	Triga-II	Rome	SHRR		Oper	60	RIDF
	TAPIRO	CSN, Casaccia	FNRR	5 KWt	Oper	71	RIDJ
	RITMO (RC-4)	Rome	POOL	100 Wt	Oper	65	RICD

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COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
ITALY (CONT.)							
CATEGORY-FUEL REPROCESSING FACILITIES							
	Eurex-1	Saluggia	UO	500 te	Plan	85	RIAA
	ITREC Pilot Plant	Rotondella	UOUM	10 te/yr	Inactv	69	RIBL
			UthO	15 kg	Oper	75	RIBS
CATEGORY-WASTE DISPOSAL FACILITIES							
	ESTER	Rome	PREP		Oper	78	RIDK
JAPAN							
CATEGORY-MINES (URANIUM & THORIUM)							
		Tono	URAN	10 te/y	Oper		RJFR
		Ningyo Toge	URAN		Oper	64	RJFV
CATEGORY-MILLS							
		Ningyo Toge	URAN		Oper	64	RJFW
CATEGORY-CONVERSION PLANTS							
	Mitsubishi Nucl Fuel	Tokai-Mura	UO2	420 te	Oper	72	RJDL
	Sumitomo Metal	Tokai-Mura	UO2	240 te	Oper	73	RJFF
	Sumitomo Metal	Tokai-Mura	UO2	340 te	Plan	79	RJGC
CATEGORY-ENRICHMENT PLANTS							
	C-1	Tokai-Mura	CENT		Oper	74	RJCE
	C-2	Tokai-Mura	CENT		Oper	76	RJCG
		Tokai-Mura	CENT	50 KSWU	Constr	80	RJGA
			LASR		R&D	75	RJGB
CATEGORY-FUEL FABRICATION PLANTS							
	Japan Nuclear Fuel	Yokosuka	UO	560 te	Oper	72	RJBS
	Kumatori Works	Osaka		40 te/yr	Oper		RJCW
	Mitsubishi Nucl Fuel	Tokai-Mura	UO	420 te	Oper	72	RJDK
	Tokai Works	Tokai-Mura	UPuO		Oper		RJDY
	Tokayama Works	Tokayama		20 te/yr	Oper		RJEW
	Nuclear Fuel	Tokai-Mura	UO	100 te	Constr	78	RJFZ
CATEGORY-RESEARCH AND TEST REACTORS							
	AHCF	Tokai-mura, Naka-gun	LHRR	50 Wt	Oper	63	RJAE
	DCA	Tokai-Mura		(small)	Oper	69	RJAN
	FCA	Tokai-Mura	TK	(small)	Oper	67	RJAQ
	HTR	Kawasaki	ARGO	.1 MWt	Oper	61	RJBN
	HTR	Ozenji, Kawasaki	ARGO	.1 MWt	Oper	62	RJBP
	JMTR	Oarai	TK-L	50 MWt	Oper	68	RJBX
	JMTRC	Oarai-machi	POOL	.01 MWt	Oper	67	RJBZ
	Joyo	Oarai	FNRR	50 MWt	Oper	74	RJCA
	Japan Rsch Reac No 1	Tokai-Mura	LHRR	.05 MWt	Oper	57	RJCC
	JRR-2	Tokai-Mura	TK-B	10 MWt	Oper	62	RJCD

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COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
JAPAN (CONT.)							
RESEARCH & TEST REACTORS (CONT.)							
	JRR-3	Tokai-Mura	TK-H	10 Mwt	Oper	64	RJCF
	JRR-4	Tokai-Mura	POOL	1 Mwt	Oper	65	RJ CJ
	Kinki University	Fuse-City, Osaka		.1 Wt			RJCU
	Kuca	Kumatori	FNRR (small)		Constr		RJCV
	KUR Kyoto Univ.	Kumatori-cho,	POOL	5 Mwt	Oper	64	RJDB
	Kyoto Univ. Reactor	Kumatori-machi	TK-L	1 Mwt			RJDC
	NCA NAIG Critical	Kawasaki-shi	POOL	200W max	Oper	63	RJDW
	NSRR	Tokai		.3 Mwt	Constr		RJDX
	OCF	Ozenji, Kawasaki	TK-L	100W max	Oper	62	RJDZ
	SHCA	Tokai-Mura	SHRR	10 Wt	Oper	61	RJEL
	TCA	Tokai-Mura	TK-L	200W max	Oper	62	RJEX
	YAYOI	Tokai-Mura	FNRR (small)		Oper	71	RJGD
	St. Paul Univ. Reac.	Yokosuka-City		.1 Mwt			RJGE
	Toshiba Reactor	Kawasaki-City	POOL	.1 Mwt			RJGF
	Hitachi Reactor	kawasaki-City	POOL	.1 Mwt			RJGG
	Goto Ikuei-Kai Reac.	Kawasaki-City		.1 Mwt			RJGH
	Triga-II-Musashi	Kawasaki	SHRR	.1 Mwt	Oper	63	RJGT
	Triga-II-Rikkyo	Sajima, Yokosuka	SHRR	.1 Mwt	Oper	61	RJGU
	TTR	Kawasaki		.1 Mwt	Oper	62	RJGW
	TTR-1	Suchirocho and	POOL	.03 Mwt	Oper	62	RJGX
	TTR-10-Kinki	Kawakae, Fuse-shi	ARGO	.1 Wt	Oper	61	RJGY
CATEGORY-FUEL REPROCESSING FACILITIES							
	PNC	Tokai-Mura	UO	1500 te	Plan	85	RJAA
	PNC		FB	120 kg/d	Plan	86	RJEE
	PNC	Tokai-Mura	UO	210 te	Oper	78	RJEF
CATEGORY-WASTE DISPOSAL FACILITIES							
	JAERI-Oarai Res E. t.	Oarai	PREP	30 kg/hr	Oper	73	RJGJ
	JAERI	Tokai-Mura	PREP	50 kg/hr	Oper	66	RJGK
KOREA (SOUTH)							
CATEGORY-MINES (URANIUM & THORIUM)							
		Taeduck	URAN		Explor		RKOV
CATEGORY-RESEARCH AND TEST REACTORS							
	Triga Mark II	Seoul	SHRR	.25 Mwt	Oper	62	RKOR
MADAGASCAR							
CATEGORY-MINES (URANIUM & THORIUM)							
		Fort Dauphin	URAN	450 te/y	Inactv	63	RMDA

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COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
MEXICO							
CATEGORY-MINES (URANIUM & THORIUM)							
	Sierra Pena Blanca	Tamaulipos	URAN		Explor	75	RMEN
		La Coma	URAN		Explor		RMEV
		Buenavista	URAN		Explor		RMEX
		Otros	URAN		Explor		RMEY
		La Domitila	URAN		Explor		RMEZ
		Nopal III	URAN		Explor		RMXA
		Margaritas-Puerto III	URAN		Explor		RMXB
		El Nopal	URAN		Explor		RMXC
		Los Amoles	URAN		Explor		RMXD
		La Preciosa	URAN		Explor		RMXE
		El Chapote	URAN		Explor		RMXF
CATEGORY-MILLS							
	Sierra Pena Blanca	Tamaulipos	URAN	15 te/y	Oper	75	RMEP
	Villa Aldama		URAN		Oper		RMEU
		La Coma	URAN		Plan		RMEW
CATEGORY-RESEARCH AND TEST REACTORS							
	RCN	Salazar		1 Mwt	Oper	68	RMES
	SUR-Mexico	Mexico City	SHRR	(small)	Oper	72	RMET
NAMIBIA							
CATEGORY-MILLS							
	Rossing	Swakopmund	URAN	6500te/y	Oper		RYBB
		Lvderitz	URAN		Explor		RYBC
		Namib Desert	URAN		Explor		RYBD
		Trekkopje			Explor		RYBE
		Langer Heinrich	URAN		Explor		RYBF
NETHERLANDS							
CATEGORY-ENRICHMENT PLANTS							
	Pilot Plant SP1	Almelo	CENT	25 KSWU	Oper	72	RNAT
	Pilot Plant SP2	Almelo	CENT	25 KSWU	Oper	72	RNAX
	Production Plant SP3	Almelo	CENT	60 KSWU	Oper	77	RNAY
CATEGORY-RESEARCH AND TEST REACTORS							
	ATHENE	Eindhoven	ARGO	10KW max	Inactv	69	RNAC
	High Flux Reactor	Petten	TK-L	45 MWt	Oper	61	RNAJ
	Hoger Onderwits	Delft	POOL	2 MWt	Oper	63	RNAL
	Kirto Drito Crit	Petten	POOL	Max 100W	Inactv	63	RNAN
	Low Flux Reactor	Petten	ARGO	.01 MWt	Oper	60	RNAP
	Subscript Suspension	N V Kema, Arnhem	LHRR	Remarks	Oper	59	RNAS
	BARN	Wageningen	POOL	.1 MWt	Oper	63	RNAZ
	SIEK	Petten	POOL	(small)		69	RNEA

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COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
NIGER							
CATEGORY-MINES (URANIUM & THORIUM)							
		Djado	URAN		Explor		RMGA
	SOMAIR	Arlit	URAN	1000te/y	Oper	71	RMGB
	SOMAIR	Arlit	URAN	1000te/y	Oper	71	RMGC
	COMINAK	Akouta	URAN	2600te/y	Oper	78	RMGD
		Madaouela	URAN		Explor		RMGG
		Azelik	URAN		Explor		RMGH
		Imouraren	URAN		Explor		RMGJ
		Techili	URAN		Explor		RMGK

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COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
		Arni	URAN		Explor		RMGL
		I-n-Adrar	URAN				RMGM
		West Afasto	URAN		Explor		RMGN
		Tegidda-in-Tessoum			Explor		RMGP

CATEGORY-MILLS
COMINAK

Akouta

URAN 2600te/y Oper 78 RMGE

NORWAY**CATEGORY-HEAVY WATER PRODUCTION**

Rjukan

20 te/y Oper 34 RMON

CATEGORY-FUEL FABRICATION PLANTS

Fuel Element Pilot Kjeller

Oper RMOP

CATEGORY-RESEARCH AND TEST REACTORS

Halden Halden, Norway

TK-H 20 MWt Oper 59 RMOD

JEEP Kjeller

TK-H 450 KWt Oper 51 RMOF

JEEP No. 2 Kjeller

TK-H 2 MWt Oper 65 RMOH

Nora Reactor Kjeller

TK-H 100 Wt Oper 61 RMOJ

CATEGORY-FUEL REPROCESSING FACILITIES

IFA Kjeller

UM (small) Inactv 61 RMOM

PAKISTAN**CATEGORY-MINES (URANIUM & THORIUM)**

Dera Ghazi Khan

Constr RPAJ

CATEGORY-RESEARCH AND TEST REACTORS

PARR Islamabad

POOL 5 MWt Oper 65 RPAD

Pak. Atomic Rsch Islamabad

POOL 5 MWt Oper 65 RPAE

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NFP INDEX BY COUNTRY

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
PAKISTAN (CONT.)							
	CATEGORY-FUEL REPROCESSING FACILITIES						
		Chasma	UO	100 te	Plan		RPAF
PERU							
	CATEGORY-MINES (URANIUM & THORIUM)						
	Vilcabamba	Cuzco	URAN	2.5 te/y	Oper	75	RPED
	Restauradora	Huancavelica	URAN		Plan	75	RPEE
	Area Ica	Ica	URAN		Plan		RPEF
	Churin	Lima	URAN		Plan		RPEG
	Jesus Maria	Moquegua	URAN		Plan		RPEH
	Colquijirca	Pasco	URAN	2.5 te/y	Oper	75	RPEJ
	Bayovar	Piura	URAN		Plan		RPEK
PHILIPPINES							
	CATEGORY-MINES (URANIUM & THORIUM)						
	Larap	Camarines Norte	URAN		Explor		RPHQ
	Bagacay	Sama-Island	URAN		Explor		RPHR
	Magna Rosa	Caramoan Peninsula	URAN		Explor		RPHS
	CATEGORY-RESEARCH AND TEST REACTORS						
	Phil Rsch React. 1	Quezon City, Phil.	POOL	1 Mwt	Oper	63	RPHG
POLAND							
	CATEGORY-RESEARCH AND TEST REACTORS						
	ZERA	Swierk	GMR	100 Wt	Oper	63	RPDB
	EWA Reactor	Swierk	TK-L	2 MWt	Oper	58	RPDD
	Maryla Reactor	Inst. of Nuclear	POOL	10 Kwt	Oper	67	RPDG
	CATEGORY-WASTE DISPOSAL FACILITIES						
	Rad Waste Storage	Rozan	DISP	2870 m3	Oper		RPKD
PORTUGAL							
	CATEGORY-MINES (URANIUM & THORIUM)						
		Senhora das Fontes	URAN		Oper		RPOJ
		Urgeirica	URAN		Oper		RPOK
		Cunha Baixa	URAN		Explor		RPOM
	Alto Alentejo	Nisa	URAN		Plan		RPON
		Quinta do Bispo	URAN		Explor		RPOQ
		Azere	URAN		Explor		RPOR
		Guarda	URAN		Explor		RPOS

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COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
PORTUGAL (CONT.)							
CATEGORY-MILLS							
	Alto Alentejo	Urgeirica Nisa	URAN URAN	150 te/y	Oper Plan	85	RPOL RPOF
CATEGORY-RESEARCH AND TEST REACTORS							
	JEN	Lisbon	POOL	1 MWt	Oper	58	RPOF
PUERTO RICO							
CATEGORY-RESEARCH AND TEST REACTORS							
	PRR	Mayaguez	LHRR	10 Wt	Oper	59	RPUE
ROMANIA							
CATEGORY-RESEARCH AND TEST REACTORS							
	WWR-C Reactor	Magurele	TK-L	3 MWt	Oper	59	RPNE
SOUTH AFRICA							
CATEGORY-MINES (URANIUM & THORIUM)							
		Palabora	URAN	120 te/y	Oper		RTAK
		Karoo	URAN		Explor		RTAM
	Hartebeestfontein	Hartebeestfontein	URAN	450 te/y	Oper		RTAN
	Buffelsfontein	Far West Rand	URAN	620 te/y	Oper		RTAP
	Vaal Reefs	Orkney	URAN	1200te/y	Oper		RTAQ
	Blyvooruitzicht	Blyvooruitzicht	URAN	287 te/y	Oper		RTAR
	West Rand	West Rand	URAN	295 te/y	Oper		RTAS
	West Driefontein	Carletonville	URAN	286 te/y	Oper		RTAT
	Western Deep Levels	Casletonville	URAN	167 te/y	Oper		RTAU
	Randfontein	Randfontein	URAN	70 te/y	Oper		RTAV
	JMS	Riebeeckstad	URAN	480 te/y	Oper	78	RTAX
	Harmony	Virginia	URAN	525 te/y	Oper		RTAY
	East Rand Gold & U	East Rand	URAN	100 te/y	Oper	78	RTFA
	Afrikander Lease	Klerksdorp	URAN	300 te/y	Plan	81	RTFB
		Parmeitkuil	URAN		Plan	82	RTFC
CATEGORY-MILLS							
	Millsite	Randfontein	URAN		Oper	77	RTAW
CATEGORY-ENRICHMENT PLANTS							
	UCOR	Valindaba	STAT	6 KSWU	Oper	76	RTAA
	UCOR	Valindaba	STAT	5000 K	Plan		RTAZ
CATEGORY-RESEARCH AND TEST REACTORS							
	Pelinduna Zero	Pelinduna, Transvaal	TK-H (small)		Oper	67	RTAG
	Safari-1	Pelindaba	TK-L Remarks		Oper	64	RTAJ

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COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
SOVIET UNION							
CATEGORY-MINES (URANIUM & THORIUM)							
		Norilsk	URAN		Oper		RRFC
		Taboshar	URAN		Oper		RRFD
		Pervomaisk	URAN		Oper		RRFE
		Tuya Muyum	URAN		Inactv		RRFF
		Mailiy Su	URAN		Oper		RRFG
		Uigur Say	URAN		Oper		RRFH
CATEGORY-ENRICHMENT PLANTS							
		Siberia	DIFF	10000 K	Oper		RRAA
			LASR				RRAB
CATEGORY-RESEARCH AND TEST REACTORS							
	IRT	Moscow	POOL	2 MWt	Oper	57	RRAM
	IRT-A	Moscow	POOL	2 MWt	Oper		RRAN
	IRT-B	Tbilishi, Georgia	POOL	2 MWt	Oper	59	RRAP
	IRT-C	Riga	POOL	2 MWt	Oper		RRAC
	IRT-D	Tomsk	POOL	2 MWt	Oper		RRAR
	IRT-E	Sverdlovsk	POOL	2 MWt	Oper		RRAS
	IRT-F	Minsk	POOL	2 MWt	Oper		RRAT
	MR Rsch Reactor	Moscow	POOL	40 MWt	Oper	67	RRBC
	RPT	Moscow	TK-H	20 MWt	Oper	52	RRBN
	BR-1 Soviet Breeder	Obninsk	FNRR	50 Wt	Inactv	55	RRBP
	BR-2	Obninsk	FNRR	.2 MWt	Inactv	57	RRBQ
	BR-5	Obninsk	FNRR	50 MWe	Oper	59	RRBR
	TR	Moscow	TK-H	2.5 MWt	Oper	57	RRBY
	WWR-C Rsch Reactor	Moscow	TK-L	2 MWt	Oper	54	RRCG
	UZBEK WWR-C Reactor	Tashkent	TK-L	2 MWt	Oper	59	RRCH
	WWR-M Research	Kiev, Ukraine	TK-L	10 MWt	Oper	60	RRCJ
	WWR-M Rsch Reactor	Leningrad	TK-L	10 MWt	Oper	59	RRCK
	WWR-2 Research	Alma-atam Kazakh	TK-L	10 MWt	Oper	63	RRCL
	WWR-C Rsch Reactor	Moscow	TK-L	3 MWt	Oper	57	RRCM
	Romashka	Moscow	FNRR	.040 MWt		64	RRES
	AM-1 Reactor	Obninsk	GMRR	30 MWt	Oper		RRET
	APS	Obninsk	GMRR	3 MWt		54	RREU
	MIR	Dimitrovgrad	TK-L	100 MWt	Oper	66	RREV
	SM-2 Test Reactor	Melekess	TK-L	75 MWt	Oper	61	RREW
	ARBUS	Melekess	OMRR	5 MWt	Oper	63	RREY
CATEGORY-FUEL REPROCESSING FACILITIES							
	Fregat-SRIAR	Melekess	FB	(small)	Oper		RREZ
CATEGORY-WASTE DISPOSAL FACILITIES							
	Moscow Plant	Moscow	PREP		Oper	65	RRFA
	NIAR	Novikovka	DISP		Oper	66	RRFB

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COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
SPAIN							
CATEGORY-MINES (URANIUM & THORIUM)							
		Soria	URAN		Explor		RSCC
		Cuidad Rodrigo	URAN	118te/y	Oper	75	RSCS
	El Pedregal	Don Benito	URAN	60 te/y	Oper		RSCU
		Andvjar	URAN	65 te/y	Oper	59	RSCV
CATEGORY-MILLS							
		Cuidad Rodrigo	URAN	118te/y	Oper	75	RSTT
		Andujar	URAN	65 te/y	Oper	59	RSDC
	Lobo	Badajoz	URAN	25 te/y	Oper		RSDD
CATEGORY-FUEL FABRICATION PLANTS							
	Juan Vigon Nuclear	Madrid			R&D		RSBM
	Fabrication Facility	Juzbada	UO	400 te	Plan	81	RSDA
CATEGORY-RESEARCH AND TEST REACTORS							
	Arbi Reactor	Bilbao	ARGO	.01 MWt	Oper	62	RSAH
	Argos Reactor	Barcelona	ARGO	.01 MWt	Oper	61	RSKA
	Coral-1 Reactor	Madrid	FNRR	10Wt max	Oper	68	RSAX
	Sp Rsch Reac. Jen-1	Madrid	POOL	6 MWt	Oper	59	RSBK
	JEN-2	Madrid	POOL	.01 MWt	Oper	68	RSBL
CATEGORY-FUEL REPROCESSING FACILITIES							
	Juan Vigon Nuclear	Madrid	UM	(small)	Oper		RSBP
CATEGORY-WASTE DISPOSAL FACILITIES							
		Sierra de Albarracin	DISP		Oper		RSDE
SWEDEN							
CATEGORY-MINES (URANIUM & THORIUM)							
	Pleutajokk	Arjeplog-Arvidsjaur	URAN		Explor		RWBP
	Ranstad	Billingen	URAN	140 te/y	Oper		RWBX
	Kvarntorp		URAN		Inactv		RWBY
CATEGORY-CONVERSION PLANTS							
	Vasteras Fuel Fac.	Vasteras	UO2	400 te	Oper	76	RWAD
CATEGORY-ENRICHMENT PLANTS							
	Royal Inst of Tech	Stockholm	LASK		R&D		RWAB
CATEGORY-HEAVY WATER PRODUCTION							
		Domat Ems		2 te/y	Inactv		RZBE
CATEGORY-FUEL FABRICATION PLANTS							
	Vasteras Fuel Fac	Vasteras	UO	400 te	Oper	72	RWAE

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COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
SWEDEN (CONT.)							
CATEGORY-RESEARCH AND TEST REACTORS							
	FR-O	Studsvik	FNRR	10 Wt	Inactv	64	RWAP
	KRITZ	Studsvik		(small)	Oper	69	RWAS
	Swedish Reac. R-O	Studsvik site	TK-H	< 50 Wt	Inactv	59	RWAY
	R-1 Heavy Water Reac	Studsvik	TK-H	600 KWt	Oper	54	RWAZ
	R-2 Rsch Reactor	Studsvik	TK-L	50 MWt	Oper	60	RWBB
	R2-O	Studsvik	POOL	1 MWt	Oper	64	RWBH
CATEGORY-FUEL REPROCESSING FACILITIES							
			UO	800 te	Plan	90	RWAC
CATEGORY-SEPARATE FUEL STORAGE FACILITIES							
	Stripa Mine	Studsvik	ROCK		Oper	77	RWBW
	Spent Fuel Storage		ROCK	1500 te	Plan	83	RWBZ
CATEGORY-WASTE DISPOSAL FACILITIES							
	AB Atomenergi	Studsvik	PREP		Oper		RWBA
		Vasteras	PREP		Oper		RWCA
SWITZERLAND							
CATEGORY-RESEARCH AND TEST REACTORS							
	AGN-201 P-111	Geneva	SHRR	20 Wt	Oper	58	RZAA
	AGN-211P-100	Basel	SHRR	100 Wt	Oper	59	RZAB
	Crocus	Lausanne	POOL	(small)	Oper	68	RZAG
	Rector Diorit	Wurenlingen	TK-H	20 MWt	Oper	60	RZAJ
	Proteus Reactor	Wurenlingen	GMRR	.001 MWt	Oper	68	RZAW
	Reactor Saphir	Wurenlingen	POOL	1 MWt	Oper	57	RZAZ
CATEGORY-WASTE DISPOSAL FACILITIES							
	EIR	Wurenlingen	DISP		R&D		RZBD
TAIWAN							
CATEGORY-FUEL FABRICATION PLANTS							
	INER	Lungt'an			Oper		RCIC
CATEGORY-RESEARCH AND TEST REACTORS							
	THOR	Hsin-Chu	POOL	1 MWt	Oper	64	RCIT
CATEGORY-FUEL REPROCESSING FACILITIES							
	Lungt'an Institute	Lungt'an	UM	(Small)	Constr		RCID
THAILAND							
CATEGORY-RESEARCH AND TEST REACTORS							
	Thai Rsch Reactor-1	Bangkok	POOL	1 MWt	Oper	62	RTHE

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COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
TURKEY							
CATEGORY-MINES (URANIUM & THORIUM)							
		Koprubasi	URAN		Oper		RTYD
		Fakili	URAN		Explor		RTYF
		Kucuk Kuyu	URAN		Explor		RTYG
		Sebinkarahisar	URAN		Explor		RTYH
		Kocarli	URAN		Explor		RTYJ
CATEGORY-RESEARCH AND TEST REACTORS							
	TR-1	Lake K. Cekmece,	POOL	1 Mwt	Oper	62	RTYA
UNITED KINGDOM							
CATEGORY-MINES (URANIUM & THORIUM)							
	Stromness	Caithness	URAN		Explor		RUEC
		Orkney	URAN		Explor		RUEZ
		Cornwall	URAN		Explor		RUFA
CATEGORY-CONVERSION PLANTS							
	Springfields	Preston	UF6	8000 te	Oper	68	RUEG
CATEGORY-ENRICHMENT PLANTS							
	Diffusion Enr. Plant	Capenhurst	LASR		R&D	75	RUAB
	Production Plant	Capenhurst	DIFF	400 KSWU	Oper	75	RUAU
	Pilot Plant	Capenhurst	CENT	50 KSWU	Oper	77	RUDL
			CENT	15 KSWU	Oper	72	RUEK
CATEGORY-FUEL FABRICATION PLANTS							
	Springfields Fab.	Preston	UM	2500 te	Oper	58	RUEH
	Springfields Fab.	Preston	UO	300 te	Oper	72	RUEJ
	Windscale Mixed-Ox.	Windscale	UPuO	10 te/y	Oper		RUEM
CATEGORY-RESEARCH AND TEST REACTORS							
	Reactor Herald	Aldermaston,	POOL	5 Mwt	Oper	59	RBUV
	Brit Exp Pile Oper	Harwell, Berkshire	GMRR	65 Mwt	Inactv	48	RUAE
	Consort Reactor	Silwood Park, Ascot	POOL	100 KwT	Oper	65	RUBA
	DAPHNE	Harwell, Berkshire	TK-H	100 Wt	Oper	62	RUBB
	Dido Reactor	Harwell, Berkshire	TK-H	22 Mwt	Oper	56	RUBC
	DIMPLE	Winfrith Rsch Estab.	TANK	100 Wt	Oper	62	RUBD
	Dounreay Mat Test	Dounreay, Caithness	TK-H	25 Mwt	Inactv	58	RUBE
	Dragon	Winfrith, Dorset	GMRR	20 Mwt	Inactv	64	RUBH
	GLEEP	Harwell, Berkshire	GMRR	Remarks	Oper	47	RUBQ
	Hazel	Harwell, Berkshire	LHRR (small)		Oper	58	RUBT
	HECTOR	Winfrith, Dorset	GMRR	100 Wt	Oper	63	RUBU
	HERO	Windscale	GMRR	3Kwt max	Inactv	62	RUBW
	Reactor Horace	Aldermaston,	POOL	10 Wt	Oper	58	RUCD
	Jason Reactor	Greenwich, London	ARGO	.01 Mwt	Oper	62	RUCK
	Juno Reactor	Winfrith, Dorset	TANK	100 Wt	Oper	64	RUCL

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NFP INDEX BY COUNTRY

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
UNITED KINGDOM (CONT.)							
CATEGORY-RESEARCH & TEST REACTORS (CONT.)							
	Lido Reactor	Harwell, Berkshire	POOL	100 Kwt	Oper	56	RUCM
	Reactor Merlin	Aldermaston,	POOL	5 MWt	Inactv	60	RUCN
	NERO	Winfrith, Dorset	GMRR	100 Wt	Inactv	60	RUCP
	NESTOR	Winfrith, Dorset	ARGO	.01 MWt	Oper	61	RUCQ
	Pluto Reactor	Harwell, Berkshire	TK-H	22 MWt	Oper	57	RUCV
	UTR-B	London	ARGO	.1 MWt	Oper	64	RUCW
	SRRC-U'TR-100	East Kilbride	ARGO	.1 MWt	Oper	63	RUDC
	URR	Risley, Warrington	ARGO	Remarks		64	RUDM
	VERA	Aldermaston, Berks.	FNRR	100 Wt	Oper	61	RUDP
	VIPER	AWRE, Aldermaston	FNRR	Remarks	Oper	67	RUDQ
	ZEBRA	Winfrith, Dorset	FNRR	.001 MWt	Oper	62	RUDV
	ZENITH	Winfrith, Dorset	GMRR	200 Wt	Oper	59	RUDX
	ZEPHYR	Harwell, Berkshire	FNRR	Remarks	Inactv	54	RUDY
	Zero Energy Thermal	Harwell, Berkshire	LHRR	(small)	Oper	52	RUDZ
	ZEUS	Harwell, Berkshire	FNRR	Max 100W	Inactv	55	RUEA
	Atazel	Harwell	LHRR	.1 MWt	Oper	64	RUEN
	Queen Mary College	London	ARGO	10 Wt			RUEP
CATEGORY-FUEL REPROCESSING FACILITIES							
	Reprocessing Plant	Windscale	UMUC	2500 te	Oper	64	RUAJ
	THORP	Windscale	UO	1200 te	Plan	87	RUAL
	Dounreay II	Dounreay	FB	10 te/yr	Oper	61	RUBF
CATEGORY-SEPERATE FUEL STORAGE FACILITIES							
		Windscale	POOL		Oper		RUEY
CATEGORY-WASTE DISPOSAL FACILITIES							
	Windscale Works	Windscale	PREP		Oper	73	RUEQ
		Windscale	PREP		Plan	86	RUER
		Windscale	PREP		Constr	80	RUES
	Glass Examination	Windscale	PREP		Constr	78	RUET
		Dounreay	PREP	30 1/hr	Plan		RUEU
		Harwell	PREP		Oper	62	RUEV
	Bradwell Power Stat.	Bradwell	PREP		Oper	67	RUEW
	Berkeley Nucl Lab	Berkeley	PREP		Oper	65	RUEX
	Hunterston A	Hunterston	PREP		Oper	67	RUEB
VENEZUELA							
CATEGORY-RESEARCH AND TEST REACTORS							
	RV-1	Alt. De Ripe,	POOL	3 MWt	Oper	60	RVEA
VIETNAM (NORTH)							
CATEGORY-RESEARCH AND TEST REACTORS							
	Triga Mark II	Dalat	SHRR	250 KWt	Oper	63	RVNA

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NFP INDEX BY COUNTRY

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
YUGOSLAVIA							
	CATEGORY-MINES (URANIUM & THORIUM)						
		Zirovski Vrh	URAN	255 te/y	Constr	82	RYUP
	CATEGORY-RESEARCH AND TEST REACTORS						
	RA	Belgrade	TK-H	6.5 Mwt	Oper	59	RYUD
	RB	Vinca	TK-H	Neglig	Oper	58	RYUG
	Triga-II-Ljubljana	Ljubljana	SHRR	.25 Mwt	Oper	65	RYUH
	CATEGORY-FUEL REPROCESSING FACILITIES						
	Boris Kidric	Belgrade	UM	(small)	Oper		RYUU
ZAIRE							
	CATEGORY-MINES (URANIUM & THORIUM)						
		Shinkolobwe	URAN	1000te/y	Inactv	60	RCGD
	CATEGORY-RESEARCH AND TEST REACTORS						
	Bel Congo Triga Reac	Kinshasa	SHRR	10 Kwt	Oper	59	RCGC
ZAMBIA							
	CATEGORY-MINES (URANIUM & THORIUM)						
		Lake Kariba	URAN		Explor		RYAC

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NFP INDEX BY CATEGORY-MINES (URANIUM & THORIUM)

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE	
ALGERIA		Tamanrasset	URAN		Explor	82	RAGA	
		Timgaouine/Abankor	URAN		Explor		RAGC	
ARGENTINA		Los Gigantes	URAN		Explor		RANA	
		Comechingones	URAN		Explor		RANB	
		Los Chihvidos	URAN		Explor		RANC	
		Sierra Cavdrada	URAN		Explor		RAND	
		Los Adobes	URAN	50 te/y	Plan		RANE	
		Don Otto	URAN	30 te/y	Oper	83	RARQ	
		Tierra Pintada	URAN	600 te/y	Constr	83	RARR	
		Malargue	URAN	30 te/y	Oper		RARS	
		Sierra de Pichinan	URAN		Explor		RART	
		Tonco-Amblayo	URAN		Explor		RARW	
		Conquin	URAN		Explor		RARX	
	Sano Gasta					RARY		
	Guandacol		URAN		Explor		RARZ	
AUSTRALIA		Maureen	URAN		Explor		RASA	
		Ben Lomond	URAN		Explor		RASB	
		Ngalia Basin	URAN		Explor		RASC	
		Beverley	URAN		Explor		RASD	
		Radium Hill	URAN		Inactv	61	RASF	
		Flinders Range	URAN		Explor		RASJ	
		Wiluna			Explor		RASK	
		Lake Way		URAN			RASL	
		Olympic Dam		URAN			RASM	
		Honeymoon		URAN		Explor		
		Honeymoon		URAN		Explor		
		Yeelirrie		URAN	2300te/y	Plan	84	RAUL
		Jabirv		URAN	3000te/y	Plan	81	RAUM
		Ranger		URAN		Explor		RAUP
		Alligator Rivers		URAN		Explor		RAUQ
		Koongarra			1500te/y	Plan		RAUR
		Nabarlek		URAN	900 te/y	Plan	81	RAUR
		Jabiluka		URAN	2500te/y	Plan	83	RAUT
		Westmoreland		URAN		Explor		RAUU
		Mary Kathleen		URAN	700 te/y	Oper	56	RAUV
	Rum Jungle		URAN	200 te/y	Inactv	71	RAUX	
	South Alligator		URAN		Inactv	62	RAUY	
	El Sherana		URAN		Inactv	65	RAUZ	
AUSTRIA		Forstau	URAN		Explor		RATP	
		Tweng	URAN		Explor		RATQ	

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NFP INDEX BY CATEGORY-MINES (URANIUM & THORIUM)

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
BOLIVIA		Cotaje	URAN		Plan	80	RBOC
BRAZIL		Campos Belos	URAN		Explor		RBRT
		Figueira	URAN		Explor		RBZD
		Pocos de Caldas	URAN	500 te/y	Constr	79	RBZG
		Pocos de Caldas	URAN	500 te/y	Constr	79	RBZH
		Olinda	URAN		Explor		RBZJ
		Araxa	URAN		Explor		RBZK
		Amorinopolis	URAN		Explor		RBZL
		Quadilatero	URAN		Explor		RBZM
		Itabapoana	THOR		Oper		RBZN
		Cumuruxatiba	THOR		Oper		RBZP
BULGARIA	Buhovo	Sofia			Oper		RBLI
CANADA	Cluff Lake	Cluff Lake	URAN	1500te/y	Constr	79	RDCG
	Birch Island	Clearwater	URAN	110 te/y	Constr	80	RDCK
	Beaverlodge	Beaverlodge	URAN	460 te/y	Oper	53	RDCL
	Key Lake	La Ronge	URAN	2300te/y	Plan	83	RDCN
	Rabbit Lake	Rabbit Lake		1730te/y	Oper	75	RDCP
	Baker Lake	Baker Lake	URAN		Explor		RDCR
	Preston	Elliot Lake	URAN		Inactv	61	RDCS
	Rio Algon	Elliot Lake	URAN	1900te/y	Oper	68	RDCU
	Agnew Lake	Sudbury	URAN	270 te/y	Oper	77	RDCW
	James Bay	James Bay	URAN		Explor		RDCZ
	Wollaston Lake	Wollaston Lake	URAN		Explor		RDDA
	Madawaska	Bancroft	URAN	320 te/y	Oper	76	RDDC
	Kitts-Michelin	Makkovik	URAN		Explor	83	RDDE
	Johan Beetz	Quebec	URAN		Explor		RDJH
		Port Radium	URAN		Inactv	60	RDJU
	Rayrock	Lake Marion	URAN		Inactv	57	RDJV
		Great Slave Lake	URAN		Explor		RDJW
		St. Armand	URAN		Explor		RDJX
		Otish Mountains	URAN		Explor		RDJY
		Mont Laurier	URAN		Explor		RDJZ
	Charlebois Lake	Charlebois Lake	URAN		Explor		RDKA
		St. Germaine Lake					RDKB
		Tyee Lake					RDKC
		Mazenod Lake					RDKD
		Dudderidge Lake					RDKE
		Thunder Bay					RDKF
		Cape Dorset					RDKG

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NFP INDEX BY CATEGORY-MINES (URANIUM & THORIUM)

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
CANADA (CONT.)							
		Ungara					RDKH
		Jourdan Lake					RDKJ
		Sakami Lake					RDKK
		Uranium City					RDKL
		Lake Athabaska					RDKM
		Blind River					RDKN
		Cobequid Mountain					RDKP
		Churchill					RDKQ
		Dismal Lake					RDKR
		Fond du Lac					RDKS
	Denison	Elliot Lake	URAN	1900te/y	Oper	57	RDKZ
CENTRAL AFRICAN REPUBLIC							
		Bakouma	URAN	1000te/y	Plan	81	RCAA
CHINA							
		Kuetchou	UTh		Oper		RPCD
		Tsinghai	UTh		Oper		RPCE
		Szechwan	UTh		Oper		RPCF
		Sinkiang	UTh		Oper		RPCG
		Chuannan	URAN		Oper		RPCJ
		Chuchou	URAN		Oper		RPCK
		Chushan	URAN		Oper		RPCL
	Hsia Chuang	Weiyuan	URAN		Oper		RPCM
CZECHOSLOVAKIA							
		Jachymov	URAN				RCKE
	Pribram	Pribram	URAN		Oper	54	RCZN
FINLAND							
		Joensuu	URAN		Inactv	61	REFF
FRANCE							
		Vendee	URAN		Oper		RFEW
		La Crouzille	URAN	200 te/y	Oper	50	RFEZ
		St. Priest	URAN				RFFA
		Lodeve	URAN	500 te/y	Oper	78	RFFK
		Roven	URAN	100 te/y	Plan	81	RFGQ
		Langogne	URAN	135 te/y	Oper	77	RFGR
		St. Pierre du Cantal	URAN	100 te/y	Oper	78	RFGU

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NFP INDEX BY CATEGORY-MINES (URANIUM & THORIUM)

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
GABON		Mikouloungou	URAN		Explor		RHBA
		Oklo	URAN		Oper	70	RHBB
		Mounana	URAN		Inactv		RHBC
		Boyindzi	URAN		Explor		RHBE
		Okelobondo	URAN		Explor		RHBF
GERMANY (EAST)		Weringerode	URAN		Oper	50	REGU
	Sorgesettendorf		URAN				REGV
		Thuringia	URAN		Oper		REGW
GERMANY (WEST)		Menzenschwand	URAN		Explor		RGFJ
		Mullenbach	URAN		Explor		RGGT
		Oberpfalzer	URAN		Explor		RGGU
		Saxony	URAN		Inactv		RGGV
GREENLAND	Kvanefjeld	Ilimaussaq	URAN		Explor		RHLA
HUNGARY		Zecs	URAN		Oper	55	RHUK
INDIA		Bhatin	URAN		Constr		RHEH
		Quilor	THOR	60 te/y	Oper		RHEJ
		Manavalakurichi	THOR	450 te/y	Oper		RHEK
		Narwapahar	URAN		Constr		RHIY
		Jaduguda	URAN		Oper	56	RHNA
IRAN		Anarak	URAN		Explor		RORR
		Yazd	URAN		Explor		RORS
IRELAND	Leinster	Mt. Leinster	URAN		Explor		RHRF
ITALY	Novazza	Val Rendena	URAN		Explor		RICP
		Valgoglio	URAN	110 te/y	Constr	80	RICQ
		Preit Valley	URAN		Explor		RIDM
		Latium	URAN		Explor		RIDN
		Lazio	URAN		Explor		RIDP

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NFP INDEX BY CATEGORY-MINES (URANIUM & THORIUM)

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
JAPAN		Tono	URAN	10 te/y	Oper		RJFR
		Ningyo Toge	URAN		Oper	64	RJFV
KOREA (SOUTH)		Taeduck	URAN		Explor		RKOV
MADAGASCAR		Fort Dauphin	URAN	450 te/y	Inactv	63	RMDA
MEXICO	Sierra Pena Blanca	Tamaulipos	URAN		Explor	75	RMEN
		La Coma	URAN		Explor		RMEV
		Buenavista	URAN		Explor		RMEX
		Otros	URAN		Explor		RMEY
		La Domitila	URAN		Explor		RMEZ
		Nopal III	URAN		Explor		RMXA
		Margaritas-PuertoIII	URAN		Explor		RMXB
		El Nopal	URAN		Explor		RMXC
		Los Amoles	URAN		Explor		RMXD
		La Preciosa	URAN		Explor		RMXE
El Chapote	URAN		Explor		RMXF		
NAMIBIA	Rossing	Swakopmund	URAN	6500te/y	Oper		RYBB
		Lvderitz	URAN		Explor		RYBC
		Namib Desert	URAN		Explor		RYBD
		Trekkopje			Explor		RYBE
		Langer Heinrich	URAN		Explor		RYBF
NIGER	SOMAIR SOMAIR COMINAK	Djado	URAN		Explor		RMGA
		Arlit	URAN	1000te/y	Oper	71	RMGB
		Arlit	URAN	1000te/y	Oper	71	RMGC
		Akouta	URAN	2600te/y	Oper	78	RMGD
		Madaouela	URAN		Explor		RMGG
		Azelik	URAN		Explor		RMGH
		Imouraren	URAN		Explor		RMGJ
		Techili	URAN		Explor		RMGK
		Arni	URAN		Explor		RMGL
		I-n-Adrar	URAN				RMGM
		West Afasto	URAN		Explor		RMGN
		Tegidda-in-Tessoum			Explor		RMGP

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NFP INDEX BY CATEGORY-MINES (URANIUM & THORIUM)

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
PAKISTAN		Dera Ghazi Khan			Constr		RPAJ
PERU	Vilcabamba	Cuzco	URAN	2.5 te/y	Oper	75	RPED
	Restauradora	Huancavelica	URAN		Plan	75	RPEE
	Area Ica	Ica	URAN		Plan		RPEF
	Churin	Lima	URAN		Plan		RPEG
	Jesus Maria	Moguegua	URAN		Plan		RPEH
	Colquijirca	Pasco	URAN	2.5 te/y	Oper	75	RPEJ
	Bayovar	Piura	URAN		Plan		RPEK
PHILIPPINES	Larap	Camarines Norte	URAN		Explor		RPHQ
	Bagacay	Sama-Island	URAN		Explor		RPHR
	Magna Rosa	Caramoan Peninsula	URAN		Explor		RPHS
PORTUGAL		Senhora das Fontes	URAN		Oper		RPOJ
		Urgeirica	URAN		Oper		RPOK
		Cunha Baixa	URAN		Explor		RPOM
	Alto Alentejo	Nisa	URAN		Plan		RPON
		Quinta do Bispo	URAN		Explor		RPOQ
		Azere	URAN		Explor		RPOR
		Guarda	URAN		Explor		RPOS
SOUTH AFRICA		Palabora	URAN	120 te/y	Oper		RTAK
		Karoo	URAN		Explor		RTAM
	Hartebeestfontein	Hartebeestfontein	URAN	450 te/y	Oper		RTAN
	Buffelsfontein	Far West Rand	URAN	620 te/y	Oper		RTAP
	Vaal Reefs	Orkney	URAN	1200te/y	Oper		RTAQ
	Blyvooruitzicht	Blyvooruitzicht	URAN	287 te/y	Oper		RTAR
	West Rand	West Rand	URAN	295 te/y	Oper		RTAS
	West Driefontein	Carletonville	URAN	286 te/y	Oper		RTAT
	Western Deep Levels	Casletonville	URAN	167 te/y	Oper		RTAU
	Randfontein	Randfontein	URAN	70 te/y	Oper		RTAV
	JMS	Riebeeckstad	URAN	480 te/y	Oper	78	RTAX
	Harmony	Virginia	URAN	525 te/y	Oper		RTAY
	East Rand Gold & U	East Rand	URAN	100 te/y	Oper	78	RTFA
	Afrikander Lease	Klerksdorp	URAN	300 te/y	Plan	81	RTFB
		Parmeitkuil	URAN		Plan	82	RTFC

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NFP INDEX BY CATEGORY-MINES (URANIUM & THORIUM)

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
SOVIET UNION							
		Norilsk	URAN		Oper		RRFC
		Taboshar	URAN		Oper		RRFD
		Pervomaisk	URAN		Oper		RRFE
		Tuya Muyum	URAN		Inactv		RRFF
		Mailiy Su	URAN		Oper		RRFG
		Uigur Say	URAN		Oper		RRFH
SPAIN							
	El Pedregal	Soria	URAN		Explor		RSCQ
		Cuidad Rodrigo	URAN	118te/y	Oper	75	RSCS
		Don Benito	URAN	60 te/y	Oper		RSCU
		Andvjar	URAN	65 te/y	Oper	59	RSCV
SWEDEN							
	Pleutajokk Ranstad Kvarntorp	Arjeplog-Arvidsjaur	URAN		Explor		RWBP
		Billingen	URAN	140 te/y	Oper		RWBX
			URAN		Inactv		RWBV
TURKEY							
		Koprubasi	URAN		Oper		RTYD
		Fakili	URAN		Explor		RTYF
		Kucuk Kuyu	URAN		Explor		RTYG
		Sebinkarahisar	URAN		Explor		RTYH
		Kocarli	URAN		Explor		RTYJ
UNITED KINGDOM							
	Stromness	Caithness	URAN		Explor		RUEC
		Orkney	URAN		Explor		RUEZ
		Cornwall	URAN		Explor		RUFA
YUGOSLAVIA							
		Zirovski Vrh	URAN	255 te/y	Constr	82	RYUP
ZAIRE							
		Shinkolobwe	URAN	1000te/y	Inactv	60	RCGD
ZAMBIA							
		Lake Kariba	URAN		Explor		RYAC

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NFP INDEX BY CATEGORY-MILLS

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
AUSTRALIA	Jabiru	Ranger	URAN	3000te/y	Plan	82	RAUN
		Nabarlek	URAN	900 te/y	Plan	81	RAUS
	Mary Kathleen	Mt. Isa	URAN	700 te/y	Oper	56	RAUW
CANADA	Beaverlodge	Beaverlodge		460 te/y	Oper	53	RDCM
	Rabbit Lake	Rabbit Lake		1730te/y	Oper	75	RDCQ
	Denison	Elliot Lake	URAN	1900te/y	Oper	57	RDCY
	Rio Algon	Elliot Lake	URAN	1900te/y	Oper	68	RDCV
	Agnew Lake	Sudbury	URAN	270 te/y	Oper	77	RDCX
	Madawaska	Bancroft	URAN	320 te/y	Oper	76	RDDD
FRANCE		L'Ecarpier	URAN	700 te/y	Oper	77	RFEV
		Bessines-sur-Gartemp	URAN	1500te/y	Oper	77	RFEY
		St. Priest	URAN	500 te/y	Oper	77	RFFB
		Langogne	URAN	135 te/y	Oper	77	RFGS
		Lodeve	URAN	1000te/y	Constr	80	RFGT
GABON		Mounana	URAN		Inactv		RHBD
INDIA		Narwapahar	URAN		Constr		RHIZ
		Jaduguda	URAN		Oper	56	RHNB
ITALY		Novazza	URAN	200 te/y	Constr	80	RIDG
JAPAN		Ningyo Toge	URAN		Oper	64	RJFW
MEXICO	Sierra Pena Blanca	Tamaulipos	URAN	15 te/y	Oper	75	RMEP
	Villa Aldama		URAN		Oper		RMEU
		La Coma	URAN		Plan		RMEW
NIGER	COMINAK	Akouta	URAN	2600te/y	Oper	78	RMGE

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NFP INDEX BY CATEGORY-MILLS

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
PORTUGAL							
	Alto Alentejo	Urgeirica Nisa	URAN URAN	150 te/y	Oper Plan	85	RPOL RPOP
SOUTH AFRICA							
	Millsite	Randfontein	URAN		Oper	77	RTAW
SPAIN							
		Cuidad Rodrigo	URAN	118te/y	Oper	75	RSCT
		Andujar	URAN	65 te/y	Oper	59	RSDC
	Lobo	Badajoz	URAN	25 te/y	Oper		RSDD

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NFP INDEX BY CATEGORY-CONVERSION PLANTS

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
CANADA	Eldorado Nuclear	Port Hope	UF6	4000 te	Oper	70	RDAY
	Eldorado Nuclear	Port Granby	UF6	10000 te	Plan	81	RDDN
FRANCE	Conversion Facility,	Pierrelatte	UF6	8000 te	Oper	77	RFFC
	Malvesi Refining Fac	Malvesi	UF4		Oper		RFFL
GERMANY (WEST)	RBU-1	Hanau	UO2	1000 te	Oper	64	RGDF
INDIA	Nucl Fuel Complex	Hyderabad	UO2	124 te	Oper	71	RHIA
ITALY	Fabricazioni Nucl	Bosco Marengo	UO2	360 te	Plan		RICT
JAPAN	Mitsubishi Nucl Fuel	Tokai-Mura	UO2	420 te	Oper	72	RJDL
	Sumitomo Metal	Tokai-Mura	UO2	240 te	Oper	73	RJFF
	Sumitomo Metal	Tokai-Mura	UO2	340 te	Plan	79	RJGC
SWEDEN	Vasteras Fuel Fac.	Vasteras	UO2	400 te	Oper	76	RWAD
UNITED KINGDOM	Springfields	Preston	UF6	8000 te	Oper	68	RUEG

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NFP INDEX BY CATEGORY-ENRICHMENT PLANTS

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
AUSTRALIA	Lucas Heights	Lucas Heights	CENT LASR		Oper R&D	65	RASE RASH
BRAZIL	Nuclei	Sepetiba Sepetiba	JET JET	180 KSWU 5000 K	Plan Plan	82	RBRA RBZA
CHINA	China 1	Lanchou	DIFF LASR	180 KSWU	Oper R&D	63	RPCB RPCH
FRANCE	Enrichment Facility Eurodif 1 Eurodif 2 (Coredif)	Pierrelatte Tricastin	DIFF DIFF DIFF CHEM LASR	500 KSWU 10800 K 5000 K 50-100 K	Oper Constr Plan Plan R&D	67 81 85 85 60	RFAA RFBQ RFBR RFFZ RFGA
GERMANY (WEST)	Karlsruhe Nuclear	Julich Karlsruhe Gronau	CENT JET CENT LASR	2 KSWU 1000 K	Oper Oper Plan R&D		RGFC RGFH RGFR RGFS
ISRAEL	Weizmann Institute	Rehovot	LASR		R&D		RTSK
JAPAN	C-1 C-2	Tokai-Mura Tokai-Mura Tokai-Mura	CENT CENT CENT LASR	50 KSWU	Oper Oper Constr R&D	74 76 80 75	RJCE RJCG RJGA RJGB
NETHERLANDS	Pilot Plant SP1 Pilot Plant SP2 Production Plant SP3	Almelo Almelo Almelo	CENT CENT CENT	25 KSWU 25 KSWU 60 KSWU	Oper Oper Oper	72 72 77	RNAT RNAX RNAY
SOUTH AFRICA	UCOR UCOR	Valindaba Valindaba	STAT STAT	6 KSWU 5000 K	Oper Plan	76	RTAA RTAZ

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NFP INDEX BY CATEGORY-ENRICHMENT PLANTS

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
SOVIET UNION		Siberia	DIFF LASR	10000 K	Oper		RRAA RRAB
SWEDEN	Royal Inst of Tech	Stockholm	LASR		R&D		RWAB
UNITED KINGDOM			LASR		R&D	75	RUAB
	Diffusion Enr. Plant	Capenhurst	DIFF	400 KSWU	Oper	75	RUAU
	Production Plant	Capenhurst	CENT	50 KSWU	Oper	77	RUDL
	Pilot Plant	Capenhurst	CENT	15 KSWU	Oper	72	RUEK

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NFP INDEX BY CATEGORY-HEAVY WATER PRODUCTION

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
ARGENTINA		Buenos Aires			Plan	84	RARF
CANADA	Port Hawkesbury	Port Hawkesbury		400te/y	Oper	70	RDFA
	Glace Bay	Glace Bay		400 te/y	Oper	76	RDJP
	Bruce A	Douglas Point		800 te/y	Oper	73	RDJQ
	Bruce B	Douglas Point		800 te/y	Constr	78	RDJR
	Bruce C	Douglas Point		800 te/y	Plan	80	RDJS
	Bruce D	Douglas Point		800 te/y	Plan	79	RDJT
	La Prade	La Prade		800 te/y	Constr	79	RDKU
		Trail		6 te/y	Inactv		RDKV
FRANCE		Toulouse	D20	2 te/y	Inactv		RFGW
		Mazingarbe	D20	26 te/y	Inactv		RFGX
GERMANY (WEST)		Frankfurt	D20	6 te/y	Inactv		RGGS
INDIA	Nangal	Nangal	D20	14 te/y	Oper	62	RHNK
	Baroda Plant	Baroda	D20	67.2te/y	Oper	76	RHNL
	Kota Plant	Kota	D20	100 te/y	Constr	80	RHNM
	Tuticorin Plant	Tuticorin	D20	71.3te/y	Constr	78	RHNN
	Talcher Plant	Talcher	D20	62.7te/y	Constr	80	RHNP
NORWAY		Rjukan		20 te/y	Oper	34	RMON
SWEDEN		Domat Ems		2 te/y	Inactv		RZBE

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NFP INDEX BY CATEGORY-FUEL FABRICATION PLANTS

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
ARGENTINA	Constituyentes	Pilot Buenos Aires	UO	50 te/yr	Oper	77	RARA
BELGIUM	Dessel Pu Fuel Prod.	Dessel	UPuO	35 te/yr	Oper	73	RBEH
	FBFC	Dessel	UO	200 te	Oper	59	RBER
	Plutonium Lab.	Mol	UPuO	(small)	Oper	60	RBEZ
BRAZIL	Inst Energie Atomica	Sao Paulo	U308	10 te/yr	Oper		RBR8
		Sepetiba	UO	50 te/yr	Constr	78	RBZE
CANADA	Canadian Gen Electr.	Peterborough	UO		Oper		RDAT
	Canadian Gen Electr.	Toronto	UO		Oper		RDAU
	Westinghouse	Port Hope	UO		Oper		RDCD
	Chalk River Nuclear	Chalk River	UPuO	(small)	Inactv	76	RDDB
	Westinghouse	Varenes	UO		Oper		RDHX
CZECHOSLOVAKIA	Nuclear Fuel Inst.	Prague			Oper		RCKF
DENMARK	Riso Research Est.	Roskilde			Oper		RENF
		Elsinore	UOUM		Oper		RENR
FRANCE	FBFC	Romans	UO	300 te	Constr	78	RFFE
	Pu Workshops ATPu,	St-Paul-les-Durance	UPuO	10 te/yr	Oper		RFFF
	SICN	Veurey	FB		Oper		RFFM
	CERCA	Romans	UM	900 te	Oper		RFGZ
	SICN	Annecy	UM	1200 te	Oper		RFHA
GERMANY (WEST)	RBU-II	Grosswelzheim	UO	150 te	Oper	66	RGDG
	RBU-I	Hanau	UO	600 te	Oper	64	RGDH
		Lingen	UO		Constr	77	RGFB
	Alkem GmbH	Hanau	UPuO	50 te/yr	Oper	66	RGFE
	Hobeg	Hanau	UOUC		Oper	72	RGFK
INDIA	Nuclear Fuels	Hyderabad	UO	124 te	Oper	71	RHNQ

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NFP INDEX BY CATEGORY-FUEL FABRICATION PLANTS

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
ITALY	Fabricazioni	Bosco Marengo	UO	200 te	Oper	74	RIBM
		San Donato	UPuO	8 te/yr	Oper		RICR
	Casaccia Center,	Rome	UPuO	8 te/yr	Oper		RICX
	Combustibili	Rotondella	UM	30 te/yr	Oper	69	RICZ
	COREN	Saluggia	UO	60 te/yr	Oper	68	RIDH
JAPAN	Japan Nuclear Fuel	Yokosuka	UO	560 te	Oper	72	RJBS
	Kumatori Works	Osaka		40 te/yr	Oper		RJCW
	Mitsubishi Nucl Fuel	Tokai-Mura	UO	420 te	Oper	72	RJDK
	Tokai Works	Tokai-Mura	UPuO		Oper		RJDY
	Tokayama Works	Tokayama		20 te/yr	Oper		RJEW
	Nuclear Fuel	Tokai-Mura	UO	100 te	Constr	78	RJFZ
NORWAY	Fuel Element Pilot	Kjeller			Oper		RMOP
SPAIN	Juan Vigon Nuclear	Madrid			R&D		RSBM
	Fabrication Facility	Juzbada	UO	400 te	Plan	81	RSDA
SWEDEN	Vasteras Fuel Fac	Vasteras	UO	400 te	Oper	72	RWAE
TAIWAN	INER	Lungt'an			Oper		RCIC
UNITED KINGDOM	Springfields Fab.	Preston	UM	2500 te	Oper	58	RUEH
	Springfields Fab.	Preston	UO	300 te	Oper	72	RUEJ
	Windscale Mixed-Ox.	Windscale	UPuO	10 te/y	Oper		RUEM

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NFP INDEX BY CATEGORY-RESEARCH AND TEST REACTORS

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
ARGENTINA							
	RA-0	Cordoba			Oper	68	RARJ
	RA-1	Buenos Aires	TANK	.15 MWt	Oper	58	RARK
	RA-2	Buenos Aires			Oper	58	RARL
	RA-3	Buenos Aires	TANK	5 MWt	Oper	67	RARM
	RA-4	Rosario	SHRR		Oper	66	RARN
	RA-5		FNRR		Constr	75	RARV
AUSTRALIA							
	High Flux Australian Moata Reactor	Sutherland, New S.W. Lucas Heights	TANK ARGO	10 MWt .01 MWt	Oper Oper	58 61	RAUE RAUH
AUSTRIA							
	ASTRA Adapted Swim. Sar-Graz	See remarks Graz	POOL ARGO	Remarks .001 MWt	Oper Oper	60 65	RATE RATH
	Triga Mark II	Vienna	SHRR	25 MWt	Oper	62	RATK
BELGIUM							
	BR-02	Mol	TK-L	500Wt	Oper	59	RBEE
	BR-1	Mol		4 MWt	Oper	56	RBEF
	Belgian Reactor BR-2	Mol	TK-L	100 MWt	Oper	60	RBEG
	BR-3/VN	Mol	TANK	40.9 MWt		65	RBEJ
	Thetis	Ghent		41 MWt	Oper	67	RBET
	VENUS	Mol	TANK	500Wt	Oper	64	RBEX
	BR-3	Mol	PWR	10.5 MWe	Oper	72	RBGE
BRAZIL							
	IEAR-1	Sao Paulo, Brazil	POOL	5 MWt		58	RBRR
	RIEN-1	Rio de Janeiro	ARGO	.01 MWt	Oper	65	RBRW
	Triga-Brazil	Belo Horizonte	SHRR	30 Kw	Oper	59	RBRY
BULGARIA							
	IRT-Sofia	Sofia	POOL		Oper	61	RBLE
CANADA							
	McMaster Nuclear NRU Reactor	Hamilton, Ontario, Chalk River, Ontario	POOL TK-H	2 MWt 110 MWt	Oper Oper	59 58	RDBF RDBJ
	NRX	Chalk River, Ontario	TK-H	33 MWt	Oper	47	RDBK
	NRX Reactor	Chalk River, Ontario	TK-H	40 MWt	Oper	48	RDBL
	Pool Test Reactor	Chalk River, Ontario	POOL	10 Wt	Oper	57	RDBZ
	Slowpoke-2	Ottawa, Ontario	POOL	.021 MWt	Oper	71	RDCA
	Slowpoke-1	Toronto, Ontario	POOL	.021 MWt	Oper	70	RDCB
	WR-1	Pinawa, Manitoba	TK-H	40 MWt	Oper	65	RDCE
	ZED-2	Chalk River, Ontario	TK-H	200 Wt	Oper	60	RDCH
	ZEEP	Chalk River, Ontario	TK-H	Remarks	Remark	45	RDCJ

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NFP INDEX BY CATEGORY-RESEARCH AND TEST REACTORS

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
COLOMBIA	Instituto De Asuntos	Bogota	POOL	20 Kwt	Oper	65	RCOB
CZECHOSLOVAKIA	HWGCR (KS-150)	Bohunice, Slovakia		590 MWt	Oper	65	RCKD
	WWR-C Prague	Rez	TK-L	2 MWt	Oper	57	RCZL
DENMARK	DR-1	Roskilde	LHRR	500wt		57	RENG
	DR-2	Roskilde	POOL	5 MWt	Oper	58	RENJ
	DR-3	Copenhagen	TK-H	10 MWt	Oper	59	RENL
EGYPT	UAR WWR-C Reactor	Inshas	TK-L	2 MWt	Oper	61	RVAE
FINLAND	FIR-1	Helsinki		250 MWt	Oper	62	REFA
	Fir-1	Otaniemi	SHRR	Remarks	Oper	62	REFB
FRANCE	Reactor Alecto	Saclay	LHRR	1 Wt	Inactv	64	RFAD
	Reactor Alize	Saclay	TK-L	1 Wt	Inactv	59	RFAE
	Aquilon	Sarclay, near Paris	TK-H	Remarks	Inactv	56	RFAH
	Azur	Cadarache	POOL	(small)	Oper	62	RFAK
	Cabri	Cadarache	POOL	Remarks	Oper	63	RFAR
	Reactor Cesar	Cadarache	GMRR	10 Kwt	Oper	64	RFBA
	Reactor Zoe	Fontenay-Aux-Roses	TK-H	150 Kwt	Oper	48	RFBK
	Reactor EL-2	Saclay	TK-H	2 MWt	Inactv	52	RFBL
	Reactor EL-3	Saclay	TK-H	20 MWt	Oper	57	RFBM
	Eole Reactor	Cadarache	TK-H	10KW max	Oper	65	RFBN
	Harmonie Reactor	Bouches-du-Rhone	FNRR	.002 MWt	Oper	65	RFCQ
	Isis Reactor	Saclay	POOL	.08 Kwt	Oper	66	RFCR
	Reactor Marius	Cadarache	GMRR	(small)	Oper	60	RFCW
	MASURCA	Cadarache	FNRR	1 Kwt	Oper	66	RFCX
	Reactor Melusine	Grenoble, Isere	POOL	8.0 MWt	Oper	58	RFCY
	Reactor Minerve	Fontenay-Aux-Roses	POOL	100 MWt	Oper	59	RFCZ
	Nereide Reactor	Fontenay-aux-Roses	POOL	.6 MWt	Oper	60	RFCB
	Osiris Reactor	Saclay, Seine-et-Ois	TK-L	50 MWt	Oper	66	RFDC
	Reactor Pegase	Cadarache	TK-L	30 MWt	Oper	63	RFDH
	Peggy	Cadarache	TK-L	1 Kwt	Oper	61	RFDJ
	Proserpine	Saclay	LHRR	1 Wt	Oper	58	RFDM
	Rapsodie Reactor	Bouches-du Rhone	FNRR	41 MWt	Oper	67	RFDR
	Reactor Siloe	Grenoble	POOL	Remarks	Oper	63	RFDV
	Reactor Siloette	Grenoble	POOL	.1 MWt	Oper	64	RFDW
	Strasbourg-Cronenbg.	Strasbourg	ARGO	.1 MWt	Oper	66	RFED

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NFP INDEX BY CATEGORY-RESEARCH AND TEST REACTORS

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
FRANCE (CONT.)							
	Reactor Triton	Fontenay-Aux-Roses	POOL	100 Wt	Oper	59	RFEM
	Ulysse Reactor	Saclay	ARGO	.1 MWt	Oper	61	RFEN
	Chaudiere	Cadarache		100 MWt	Oper	75	RFGC
	High-Flux Reactor	Grenoble	TK-H	60 MWt	Oper	71	RFGD
GERMANY (WEST)							
	AVR	KFA, Julich	GMRR	46 MWt	Oper	67	RGAF
	Adibka-1 Reactor	Julich	LHRR	10 Wt	Oper	67	RGAC
	AEG Nullenergie	Grosswelzheim	TK-L	100 Wt	Oper	67	RGAD
	ANEX	Geesthacht		0 MWt	Oper	64	RGAE
	BER	Berlin-Wannsee	LHRR	50 MWt	Oper	58	RGAN
	FMRB	Braunschweig	POOL	1 MWt	Oper	67	RGAV
	FR-2	Karlsruhe	ARGO	12 MWt	Oper	61	RGAW
	Rsch Reactor	Frankfurt/Main	LHRR	50 KWt		58	RGAX
	Rsch Reac Geesthacht	Geesthacht/Elbe	POOL	5 MWt	Oper	58	RGAY
	FRG-2	Geesthacht/Elbe	POOL	15 MWt	Oper	68	RGAZ
	Dido-Julich	Julich	TK-H	10 MWt	Oper	61	RGBB
	Rsch Reactor Muenchen	Garching	POOL	4 MWt	Oper	57	RGBC
	Triga-I-Hannover	Hannover		.25 MWt	Oper	72	RGBP
	React. Merlin-Julich	Julich, W. Germany	POOL	5 MWt	Oper	61	RGCP
	PR-10	Grosswelzheim					RGDD
	SAR-1	Garching	ARGO		Oper	59	RGDQ
	SNEAK	Leopoldshafen	FNRR	1Kwt max	Oper	66	RGDR
	Stark	Karlsruhe	ARGO		Oper	64	RGDU
	SUR-Aachen	Aachen	SHRR	.1 Wt	Oper	66	RGDW
	SUR-Berlin	Berlin	SHRR	.1 Wt	Oper	63	RGDX
	SUR-Bremen	Bremen	SHRR	.1 Wt	Oper	67	RGDY
	SUR-Darmstadt	Darmstadt	SHRR	.1 Wt	Oper	63	RGDZ
	SUR-Hamburg	Hamburg	SHRR	.1 Wt	Oper	65	RGEA
	SUR-Karlsruhe	Karlsruhe	SHRR	.1 Wt	Oper	66	RGEB
	SUR-Kiel	Kiel	SHRR	.1 Wt	Oper	66	RGEC
	SUR-Stuttgart	Stuttgart	SHRR	.1 Wt	Oper	64	RGEF
	SUR-Ulm	Ulm	SHRR	.1 Wt	Oper	65	RGEG
	Triga-I-Heidelberg	Heidelberg	SHRR	.25 MWt	Oper	66	RGEM
	German Triga	Mainz, West Germany	SHRR	10 Wt	Oper	65	RGEN
	HDR	Grosswelzheim/Main		100 MWt		68	RGFQ
	CFG	Karlsruhe	SHRR	Max 100W	Oper	64	RGFT
	BER-2	Berlin	POOL	5 MWt	Oper	73	RGFX
	Kather	Julich			Oper	73	RGFY
	SUR-100	Furtwangen	SHRR		Oper	73	RGFZ
	AEG-PR-10	Unterfranken	ARGO	10 Wt	Oper	61	RGGA
	SUR-Hannover	Hannover	SHRR		Oper	61	RGGE
	Triga Conversion	Frankfurt	SHRR	1 MWt			RGGF
	WWR-5 (m)	Rosendorf	TANK	6 MWt			RGGG
GREECE							
	GRR	Athens	POOL	1 MWt		59	RHCE

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NFP INDEX BY CATEGORY-RESEARCH AND TEST REACTORS

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
HUNGARY	Hungarian WWR-C	Csillererc	TANK	2 Mwt	Oper	59	RHUF
INDIA	Kalpakkum PFR	Kalpakkam	FNRR	.03 Mwt	Plan		RHEB
	FBTR	Kalpakkam	FNRR	50 Mwt	Constr		RHEL
	Reactor Apsara	Trombay	POOL	1 Mwt	Oper	56	RHIF
	CIR	Trombay	TK-H	40 Mwt	Oper	60	RHIG
	Zerlina	Trombay	TANK	MAX100wt	Oper	61	RHIW
	Purnima	Trombay			Oper	72	RHNZ
INDONESIA	Triga-Mark II	Bandung	SHRR	.25 Mwt	Oper	65	RHOE
IRAN	U of Teheran Rsch	Teheran	POOL	5 Mwt	Oper	67	RORM
	UTRR Conversion	Tehran	SHRR	10 Mwt	Constr		RORQ
ISRAEL	IRR	Rehovath	POOL	5 Mwt	Oper	59	RTSF
	IRR-2	Negev		26 Mwt	Oper		RTSG
ITALY	AGN-201-110	near Palermo	SHRR	.1 Wt	Oper	60	RIAD
	Avogadro RS-1	Saluggia	POOL	7 Mwt	Inactv	60	RIAE
	CIRENE	Latina		128.5Mwt			RIAG
	ECO	Ispra (Varese)	TK-H	1Kwt max	Inactv	65	RIAK
	Essor reactor	Ispra (Varese)	TK-H	36.6 Mwt	Oper	67	RIBK
	RTS-1	San Piero a Grado	POOL	5 Mwt	Oper	65	RIBN
	Reactor Ispra-1	Ispra, Varese	TK-H	5 Mwt	Inactv	59	RIBR
	ISPRA-2 (RANA)	Casaccia	POOL	Remarks	Oper	61	RICA
	RB-1	Montecuccolino	GMRR	10 Wt	Oper	62	RICB
	RB/2	Bologna	ARGO	10 Kwt	Oper	63	RICC
	ROSPO	Roma	OMRR (small)		Oper	63	RICE
	Triga-II Pavia	Pavia	SHRR	Remarks	Oper	65	RICK
	Triga Mark II	Rome	SHRR	1 Mwt	Oper	59	RIDA
	CESNEF	Milan	LHRR	50 Kwt	Oper	60	RIDC
	PEC	Lake Brasimore	FNRR	140 Mwt	Constr	78	RIDD
	RB-3	Univ. of Bologna	TK-H		Oper	71	RIDE
	Triga-II	Rome	SHRR		Oper	60	RIDF
	TAPIRO	CSN, Casaccia	FNRR	5 Kwt	Oper	71	RIDJ
	RITMO (RC-4)	Rome	POOL	100 Wt	Oper	65	RICD

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NFP INDEX BY CATEGORY-RESEARCH AND TEST REACTORS

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
JAPAN							
	AHCF	Tokai-mura, Naka-gun	LHRR	50 Wt	Oper	63	RJAE
	DCA	Tokai-Mura		(small)	Oper	69	RJAN
	FCA	Tokai-Mura	TK	(small)	Oper	67	RJAJ
	HTR	Kawasaki	ARGO	.1 Mwt	Oper	61	RJBN
	HTR	Ozenji, Kawasaki	ARGO	.1 Mwt	Oper	62	RJBP
	JMTR	Oarai	TK-L	50 Mwt	Oper	68	RJBX
	JMTRC	Oarai-machi	POOL	.01 Mwt	Oper	67	RJBZ
	Joyo	Oarai	FNRR	50 Mwt	Oper	74	RJCA
	Japan Rsch Reac No 1	Tokai-Mura	LHRR	.05 Mwt	Oper	57	RJCC
	JRR-2	Tokai-Mura	TK-H	10 Mwt	Oper	62	RJCD
	JRP-3	Tokai-Mura	TK-H	10 Mwt	Oper	64	RJCF
	JRR-4	Tokai-Mura	POOL	1 Mwt	Oper	65	RJ CJ
	Kinki University	Fuse-City, Osaka		.1 Wt			RJCU
	Kuca	Kumatori	FNRR	(small)	Constr		RJCV
	KUR Kyoto Univ.	Kumatori-cho,	POOL	5 Mwt	Oper	64	RJDB
	Kyoto Univ. Reactor	Kumatori-machi	TK-L	1 Mwt			RJDC
	NCA NAIG Critical	Kawasaki-shi	POOL	200W max	Oper	63	RJDW
	NSRR	Tokai		.3 Mwt	Constr		RJDX
	OCF	Ozenji, Kawasaki	TK-L	100W max	Oper	62	RJDZ
	SHCA	Tokai-Mura	SHRR	10 Wt	Oper	61	RJEL
	TCA	Tokai-Mura	TK-L	200W max	Oper	62	RJEX
	YAYOI	Tokai-Mura	FNRR	(small)	Oper	71	RJGD
	St. Paul Univ. Reac.	Yokosuka-City		.1 Mwt			RJGE
	Toshiba Reactor	Kawasaki-City	POOL	.1 Mwt			RJGF
	Hitachi Reactor	kawasaki-City	POOL	.1 Mwt			RJGG
	Goto Ikuei-Kai Reac.	Kawasaki-City		.1 Mwt			RJGH
	Triga-II-Musashi	Kawasaki	SHRR	.1 Mwt	Oper	63	RJGT
	Triga-II-Rikkyo	Sajima, Yokosuka	SHRR	.1 Mwt	Oper	61	RJGU
	TTR	Kawasaki		.1 Mwt	Oper	62	RJGW
	TTR-1	Suchirocho and	POOL	.03 Mwt	Oper	62	RJGX
	UTR-10-Kinki	Kawakae, Fuse-shi	ARGO	.1 Wt	Oper	61	RJGY
KOREA (SOUTH)							
	Triga Mark II	Seoul	SHRR	.25 Mwt	Oper	62	RKOR
MEXICO							
	RCN	Salazar		1 Mwt	Oper	68	RMES
	SUR-Mexico	Mexico City	SHRR	(small)	Oper	72	RMET
NETHERLANDS							
	ATHENE	Eindhoven	ARGO	10KW max	Inactv	69	RNAC
	High Flux Reactor	Petten	TK-L	45 Mwt	Oper	61	RNAJ
	Hoger Onderwits	Delft	POOL	2 Mwt	Oper	63	RNAL
	Kirto Drito Crit	Petten	POOL	Max 100W	Inactv	63	RNAN
	Low Flux Reactor	Petten	ARGO	.01 Mwt	Oper	60	RNAP
	Subscript Suspension	N V Kema, Arnhem	LHRR	Remarks	Oper	59	RNAS
	BARN	Wageningen	POOL	.1 Mwt	Oper	63	RNAZ
	SIEK	Petten	POOL	(small)		69	RNEA

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NFP INDEX BY CATEGORY-RESEARCH AND TEST REACTORS

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
NORWAY							
	Halden	Halden, Norway	TK-H	20 MWt	Oper	59	RMOD
	JEEP	Kjeller	TK-H	450 KWt	Oper	51	RMOF
	JEEP No. 2	Kjeller	TK-H	2 MWt	Oper	65	RMOH
	Nora Reactor	Kjeller	TK-H	100 Wt	Oper	61	RMOJ
PAKISTAN							
	PARR	Islamabad	POOL	5 MWt	Oper	65	RPAD
	Pak. Atomic Rsch	Islamabad	POOL	5 MWt	Oper	65	RPAE
PHILIPPINES							
	Phil Rsch React. 1	Quezon City, Phil.	POOL	1 MWt	Oper	63	RPHG
POLAND							
	ZERA	Swierk	GMRR	100 Wt	Oper	63	RPDB
	EWA Reactor	Swierk	TK-L	2 MWt	Oper	58	RPDD
	Maryla Reactor	Inst. of Nuclear	POOL	10 KWt	Oper	67	RPDG
PORTUGAL							
	JEN	Lisbon	POOL	1 MWt	Oper	58	RPOF
PUERTO RICO							
	PRR	Mayaguez	LHRR	10 Wt	Oper	59	RPUE
ROMANIA							
	WWR-C Reactor	Magurele	TK-L	3 MWt	Oper	59	RPNE
SOUTH AFRICA							
	Pelinduna Zero	Pelinduna, Transvaal	TK-H (small)		Oper	67	RTAG
	Safari-1	Pelindaba	TK-L	Remarks	Oper	64	RTAJ
SOVIET UNION							
	IRT	Moscow	POOL	2 MWt	Oper	57	RRAM
	IRT-A	Moscow	POOL	2 MWt	Oper		RRAN
	IRT-B	Tbilishi, Georgia	POOL	2 MWt	Oper	59	RRAP
	IRT-C	Riga	POOL	2 MWt	Oper		RRAC
	IRT-D	Tomsk	POOL	2 MWt	Oper		RRAR
	IRT-E	Sverdlovsk	POOL	2 MWt	Oper		RRAS
	IRT-F	Minsk	POOL	2 MWt	Oper		RRAT
	MR Rsch Reactor	Moscow	POOL	40 MWt	Oper	67	RRBC
	RPT	Moscow	TK-H	20 MWt	Oper	52	RRBN
	BR-1 Soviet Breeder	Obninsk	FNRR	50 Wt	Inactv	55	RRBP
	BR-2	Obninsk	FNRR	.2 MWt	Inactv	57	RRBC

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NFP INDEX BY CATEGORY-RESEARCH AND TEST REACTORS

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
SOVIET UNION (CONT.)							
	BR-5	Obninsk	FNRR	50 MWe	Oper	59	RRBR
	TR	Moscow	TK-H	2.5 MWt	Oper	57	RRBY
	WWR-C Rsch Reactor	Moscow	TK-L	2 MWt	Oper	54	RRCG
	UZBEK WWR-C Reactor	Tashkent	TK-L	2 MWt	Oper	59	RRCH
	WWR-M Research	Kiev, Ukraine	TK-L	10 MWt	Oper	60	RRCJ
	WWR-M Rsch Reactor	Leningrad	TK-L	10 MWt	Oper	59	RRCK
	WWR-2 Research	Alma-atam Kazakh	TK-L	10 MWt	Oper	63	RRCL
	WWR-C Rsch Reactor	Moscow	TK-L	3 MWt	Oper	57	RRCM
	Romashka	Moscow	FNRR	.040 MWt		64	RRES
	AM-1 Reactor	Obninsk	GMRR	30 MWt	Oper		RRET
	APS	Obninsk	GMRR	3 MWt		54	RREU
	MIR	Dimit. ovgrad	TK-L	100 MWt	Oper	66	RREV
	SM-2 Test Reactor	Melekess	TK-L	75 MWt	Oper	61	RREW
	ARBUS	Melekess	OMRR	5 MWt	Oper	63	RREY
SPAIN							
	Arbi Reactor	Bilbao	ARGO	.01 MWt	Oper	62	RSAH
	Argos Reactor	Barcelona	ARGO	.01 MWt	Oper	61	RSAX
	Coral-1 Reactor	Madrid	FNRR	10Wt max	Oper	68	RSAX
	Sp Rsch React. Jen-1	Madrid	POOL	6 MWt	Oper	59	RSBK
	JEN-2	Madrid	POOL	.01 MWt	Oper	68	RSBL
SWEDEN							
	FR-O	Studsvik	FNRR	10 Wt	Inactv	64	RWAP
	KRITZ	Studsvik		(small)	Oper	69	RWAS
	Swedish Reac. R-O	Studsvik site	TK-H	< 50 Wt	Inactv	59	RWAY
	R-1 Heavy Water Reac	Studsvik	TK-H	600 Kw	Oper	54	RWAZ
	R-2 Rsch Reactor	Studsvik	TK-L	50 MWt	Oper	60	RWBB
	R2-O	Studsvik	POOL	1 MWt	Oper	64	RWBH
SWITZERLAND							
	AGN-201 P-111	Geneva	SHRR	20 Wt	Oper	58	RZAA
	AGN-211P-100	Basel	SHRR	100 Wt	Oper	59	RZAB
	Crocus	Lausanne	POOL	(small)	Oper	68	RZAG
	Rector Diorit	Wurenlingen	TK-H	20 MWt	Oper	60	RZAJ
	Proteus Reactor	Wurenlingen	GMRR	.001 MWt	Oper	68	RZAW
	Reactor Saphir	Wurenlingen	POOL	1 MWt	Oper	57	RZAZ
TAIWAN							
	THOR	Hsin-Chu	POOL	1 MWt	Oper	64	RCIT
THAILAND							
	Thai Rsch Reactor-1	Bangkok	POOL	1 MWt	Oper	62	RTHE

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NFP INDEX BY CATEGORY-RESEARCH AND TEST REACTORS

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE CAPACITY	STATUS	YR	NFP CODE
TURKEY	TR-1	Lake K. Cekmece,	POOL 1 MWt	Oper	62	RTYA
UNITED KINGDOM	Reactor Herald	Aldermaston,	POOL 5 MWt	Oper	59	RBUV
	Brit Exp Pile Oper	Harwell, Berkshire	GMRR 65 MWt	Inactv	48	RUAE
	Consort Reactor	Silwood Park, Ascot	POOL 100 KWt	Oper	65	RUBA
	DAPHNE	Harwell, Berkshire	TK-H 100 Wt	Oper	62	RUBB
	Dido Reactor	Harwell, Berkshire	TK-H 22 MWt	Oper	56	RUBC
	DIMPLE	Winfrith Rsch Estab.	TANK 100 Wt	Oper	62	RUBD
	Dounreay Mat Test	Dounreay, Caithness	TK-H 25 MWt	Inactv	58	RUBE
	Dragon	Winfrith, Dorset	GMRR 20 MWt	Inactv	64	RUBH
	GLEEP	Harwell, Berkshire	GMRR Remarks	Oper	47	RUBQ
	Hazel	Harwell, Berkshire	LHRR (small)	Oper	58	RUBT
	HECTOR	Winfrith, Dorset	GMRR 100 Wt	Oper	63	RUBU
	HERO	Windscale	GMRR 3Kwt max	Inactv	62	RUBW
	Reactor Horace	Aldermaston,	POOL 10 Wt	Oper	58	RUCD
	Jason Reactor	Greenwich, London	ARGO .01 MWt	Oper	62	RUCK
	Juno Reactor	Winfrith, Dorset	TANK 100 Wt	Oper	64	RUCL
	Lido Reactor	Harwell, Berkshire	POOL 100 Kwt	Oper	56	RUCM
	Reactor Merlin	Aldermaston,	POOL 5 MWt	Inactv	60	RUCN
	NERO	Winfrith, Dorset	GMRR 100 Wt	Inactv	60	RUCP
	NESTOR	Winfrith, Dorset	ARGO .01 MWt	Oper	61	RUCQ
	Pluto Reactor	Harwell, Berkshire	TK-H 22 MWt	Oper	57	RUCV
	UTR-B	London	ARGO .1 MWt	Oper	64	RUCW
	SRRC-UTR-100	East Kilbride	ARGO .1 MWt	Oper	63	RUDC
	URR	Risley, Warrington	ARGO Remarks		64	RUDM
	VERA	Aldermaston, Berks.	FNRR 100 Wt	Oper	61	RUDP
	VIPER	AWRE, Aldermaston	FNRR Remarks	Oper	67	RUDQ
	ZEBRA	Winfrith, Dorset	FNRR .001 MWt	Oper	62	RUDV
	ZENITH	Winfrith, Dorset	GMRR 200 Wt	Oper	59	RUDX
	ZEPHYR	Harwell, Berkshire	FNRR Remarks	Inactv	54	RUDY
	Zero Energy Thermal	Harwell, Berkshire	LHRR (small)	Oper	52	RUDZ
	ZEUS	Harwell, Berkshire	FNRR Max 100W	Inactv	55	RUEA
	Atazel	Harwell	LHRR .1 MWt	Oper	64	RUEN
	Queen Mary College	London	ARGO 10 Wt			RUEP
VENEZUELA	RV-1	Alt. De Ripe,	POOL 3 MWt	Oper	60	RVEA
VIETNAM (NORTH)	Triga Mark II	Dalat	SHRR 250 KWt	Oper	63	RVNA
YUGOSLAVIA	RA	Belgrade	TK-H 6.5 MWt	Oper	59	RYUD
	RB	Vinca	TK-H Neglig	Oper	58	RYUG
	Triga-II-Ljubljana	Ljubljana	SHRR .25 MWt	Oper	65	RYUH
ZAIRE	Bel Congo Triga Reac	Kinshasa	SHRR 10 KWt	Oper	59	RCGC

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NFP INDEX BY CATEGORY-FUEL REPROCESSING FACILITIES

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
ARGENTINA	Ezeiza Atomic Centre	Ezeiza	UM	(small)	Oper	77	RARG
BELGIUM	Eurochemic	Mol	UMUO	60 te/yr	Inactv	66	RBEQ
BRAZIL		Sepetiba	UO	5 kg/day	Plan	86	RBRB
CANADA	Chalk River Nucl Lab	Chalk River	UO	(small)	Inactv		RDAD
FRANCE	UP-2	Cap de La Hague	UMUO	800 te	Oper	66	RFAU
	UP-3	Cap de La Hague	UO	1600 te	Plan	87	RFAV
	AT-1	Cap de La Hague	FB	200 kg	Oper	66	RFER
	UP-1	Marcoule	UM	1000 te	Oper	58	RFFJ
	SAP	Marcoule	FB	5 te/yr	Oper		RFGB
GERMANY (WEST)	URG/KEWA		UO	1500 te	Plan	86	RGCC
	JUPITER	Julich	HTGR	2 kg/day	Oper	77	RGCF
	WAK	Karlsruhe	UO	40 te/yr	Oper	71	RGEW
	DWK	Gorleben	UO	1400 te	Plan	88	RGFU
INDIA		Kalpakkam	UO	50 te/v	Plan	82	RHED
	PREFRE	Tarapur	UOUM	100 te	Oper	77	RHIC
		Trombay	UThO	(small)	Oper		RHID
	Plutonium Plant	Trombay	UMUO	60 te/yr	Oper	65	RHIL
ITALY			UO	500 te	Plan	85	RIAA
	Eurex-1	Saluggia	UOUM	10 te/yr	Inactv	69	RIBL
	ITREC Pilot Plant	Rotondella	UThO	15 kg	Oper	75	RIBS
JAPAN	PNC	Tokai-Mura	UO	1500 te	Plan	85	RJAA
	PNC		FB	120 kg/d	Plan	86	RJEE
	PNC	Tokai-Mura	UO	210 te	Oper	78	RJEF

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NFP INDEX BY CATEGORY-FUEL REPROCESSING FACILITIES

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
NORWAY	IFA	Kjeller	UM	(small)	Inactv	61	RMOM
PAKISTAN		Chasma	UO	100 te	Plan		RPAF
SOVIET UNION	Fregat-SRIAR	Melekess	FB	(small)	Oper		RREZ
SPAIN	Juan Vigon Nuclear	Madrid	UM	(small)	Oper		RSBP
SWEDEN			UO	800 te	Plan	90	RWAC
TAIWAN	Lungt'an Institute	Lungt'an	UM	(Small)	Constr		RCID
UNITED KINGDOM	Reprocessing Plant	Windscale	UMUO	2500 te	Oper	64	RUAJ
	THORP	Windscale	UO	1200 te	Plan	87	RUAL
	Dounreay II	Dounreay	FB	10 te/yr	Oper	61	RUBF
YUGOSLAVIA	Boris Kidric	Belgrade	UM	(small)	Oper		RYUU

NFP INDEX BY CATEGORY-SEPARATE FUEL STORAGE FACILITIES

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
CANADA							
	Whiteshell	Whiteshell	SURF		Oper		RDJJ
	Chalk River Nuclear	Chalk River	HOLE		Oper		RDJL
	Pickering Nucl Power	Pickering	POOL		Oper		RDJM
	Bruce Nuclear Power	Tiverton	POOL		Oper		RDJN
GERMANY (WEST)							
		Ahaus	POOL	1500 te	Plan	83	RGGB
		Gorleben	POOL	4000 te	Plan		RGGC
SWEDEN							
	Stripa Mine	Studsvik	ROCK		Oper	77	RWBW
	Spent Fuel Storage		ROCK	1500 te	Plan	83	RWBZ
UNITED KINGDOM							
		Windscale	POOL		Oper		RUEY

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NFP INDEX BY CATEGORY-WASTE DISPOSAL FACILITIES

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE
BELGIUM							
	Eurobitum	Mol	PREP	650 m3	Oper	77	RBGF
	PAMELA II	Mol	PREP	40 l/hr	Plan	81	RBGG
		Mol	DISP	10000 m3	Plan	79	RBGH
		Mol	PREP	80 l/hr	Oper	64	RBGJ
	EUROSTORAGE	Mol	DISP		Oper		RBGK
		Mol	PREP	150 Kg/h	Oper	75	RBGL
		Atlantic Ocean	DISP	2000 te	Oper		RBGM
	Eurowatt	Mol	PREP	1000 l/d	Constr		RBGN
		Mol	PREP	200 kg/h	Inactv	60	RBGP
		Mol	PREP	10 Kg/hr	Oper	70	RBGR
CANADA							
		White Lake	ROCK		Oper		RDJK
	Chalk R Nucl Lab	Chalk River	PREP	200 kg/h	Inactv	60	RDKW
	RWVRF	Tiverton	PREP		Oper	77	RDKX
	Chalk R Nucl Lab	Chalk River	PREP		Oper		RDKY
CZECHOSLOVAKIA							
	NRI-Rez	Prague	PREP	3.6 m3/h	Oper	61	RCKG
FRANCE							
	Saclay Nucl Res Cen	Seine-et-Oise	PREP		Oper		RFGE
		Cap de La Hague	DISP	1.3 Mbbl	Oper		RFGF
	VULCAIN	Marcoule	PREP		Oper		RFGG
	PIVER	Marcoule	PREP		Inactv	69	RFGH
	GULLIVER	Fontenay-aux-Roses	PREP		Inactv	63	RFGJ
	AVM	Marcoule	PREP	30 l/hr	Oper	78	RF GK
	AVH	Cap de La Hague	PREP	100 l/hr	Plan	82	RFGL
	Center of Nucl Study	Grenoble	PREP		Constr		RFGM
	Center of Nucl Study	Grenoble	PREP	30 kg/hr	Oper	61	RFGN
	Cadarache Nuclear	St. Paul-les-Durance	PREP		Oper	77	RFGP
	Fontenay-aux-Roses	Fontenay-aux-Roses	PREP	50 kg/hr	Oper	67	RFGY
		Strasbourg	PREP	15 kg/hr	Oper	70	RFHB
GERMANY (EAST)							
		Bartensleben	DISP		Plan		REGT
GERMANY (WEST)							
	Asse Salt Mine	Remlingen	DISP	4 Mm3	Oper	67	RGGD
	KfK-1	Karlsruhe	PREP	2.5 te/d	Oper	77	RGGH
	KfK-2	Karlsruhe	PREP	15 kg	Oper	75	RGGJ
	FIPS-II	Julich	PREP	1 kg/hr	Oper	77	RGGK
	FIPS-I	Julich	PREP	1 kg/hr	Inactv	72	RGGL
	VERA	Karlsruhe	PREP		Inactv	70	RGGM
		Karlsruhe	PREP	30 l/hr	Oper	76	RGGN

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NFP INDEX BY CATEGORY-WASTE DISPOSAL FACILITIES

COUNTRY	FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	NFP CODE	
INDIA	Waste Immobilization BARC	Tarapur Trombay	PREP	25 l/hr	Constr	79	RHEF	
			PREP	45 kg/hr	Oper	66	RHEM	
ITALY	ESTER	Rome	PREP		Oper	78	RIDK	
JAPAN	JAERI-Oarai Res Est. JAERI	Oarai Tokai-Mura	PREP	30 kg/hr	Oper	73	RJGJ	
			PREP	50 kg/hr	Oper	66	RJGK	
POLAND	Rad Waste Storage	Rozan	DISP	2870 m3	Oper		RPDK	
SOVIET UNION	Moscow Plant NIAR	Moscow Novikovka	PREP		Oper	65	RRFA	
			DISP		Oper	66	RRFB	
SPAIN		Sierra de Albarracin	DISP		Oper		RSDB	
SWEDEN	AB Atomenergi	Studsvik Vasteras	PREP		Oper		RWBA	
			PREP		Oper		RWCA	
SWITZERLAND	EIR	Wurenlingen	DISP		R&D		RZBD	
UNITED KINGDOM	Windscale Works	Windscale	PREP		Oper	73	RUEQ	
			PREP		Plan	86	RUER	
			PREP		Constr	80	RUES	
	Glass Examination	Windscale	Dounreay	PREP		Constr	78	RUET
				PREP	30 l/hr	Plan		RUEV
	Bradwell Power Stat. Berkeley Nucl Lab Hunterston A	Bradwell Berkeley Hunterston		PREP		Oper	62	RUEV
				PREP		Oper	67	RUEW
				PREP		Oper	65	RUEX
			PREP		Oper	67	RUFB	

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ACTIVITY--ALGERIA RESOURCE RECOVERY
CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 01 AUG 78

FACILITY NAME

LOCATION
Tamanrasset

FAC
TYPE CAPACITY STATUS YR CODE
URAN Explor 82 RAGA

LATITUDE- 22 DEG 50 MIN N

LONGITUDE- 05 DEG 28 MIN E

TECHNOLOGY SOURCE-

OWNER/OPERATOR--SONAREM

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE--Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS--Societe Nationale de Recherches et d'Exploitations Minieres
(SONAREM).

Potential resources in the Ahagger: 50,000 te
(Hoggar is variation of Ahagger)

REFERENCES-

- 1-Uranium Resources, Production and Demand, IAEA, Dec 77, pp. 43-44
- 2-Mining Magazine, March 1978, p. 251

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ACTIVITY--ALGERIA RESOURCE RECOVERY
 CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 31 JUL 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
	Timgaouine/Abankor	URAN		Explor		RAGC

LATITUDE- 21 DEG 37 MIN N

LONGITUDE- 04 DEG 30 MIN E

TECHNOLOGY SOURCE-

OWNER/OPERATOR--SONAREM

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE--Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS--Societe Nationale de Recherches et d'Exploitations Minieres
 (SONAREM)

REFERENCES-

- 1-Mining Magazine, March 1978, p. 251
- 2-Mining Magazine, March 1977, p. 205

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ACTIVITY--ARGENTINA RESOURCE RECOVERY
CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 14 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
	Los Gigantes Cordoba	URAN		Explor		RANA

LATITUDE-	DEG	MIN	LONGITUDE-	DEG	MIN
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TECHNOLOGY SOURCE-

OWNER/OPERATOR-CNEA

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-CNEA- Comision Nacional de Energia Atomica

REFERENCES-

1-Uranium Resources, Production and Demand, IAEA, Dec 1977, p. 44

ACTIVITY--ARGENTINA RESOURCE RECOVERY
 CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 14 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
	Comechingones San Luis	URAN		Explor		RANB

LATITUDE- 32 DEG 30 MIN S

LONGITUDE- 65 DEG MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-CNEA

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-CNEA- Comision Nacional de Energia Atomica

REFERENCES-

1-Uranium Resources, Production and Demand, IAEA, Dec 1977, p. 45

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ACTIVITY--ARGENTINA RESOURCE RECOVERY
CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 14 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
	Los Chihvidos Neuquen	URAN		Explor		RANC

LATITUDE- 38 DEG MIN S LONGITUDE- 70 DEG MIN W

TECHNOLOGY SOURCE- OWNER/OPERATOR-CNEA

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-CNEA- Comision Nacional de Energia Atomica

REFERENCES-

1-Uranium Resources, Production and Demand, IAEA, Dec 1977, p. 45

ACTIVITY--ARGENTINA RESOURCE RECOVERY
 CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 14 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
	Sierra Cavdrada Chabut	URAN		Explor		RAND

LATITUDE- DEG MIN LONGITUDE- DEG MIN

TECHNOLOGY SOURCE-

OWNER/OPERATOR-CNEA

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-CNEA- Comision Nacional de Energia Atomica

REFERENCES-

1-Uranium Resources, Production and Demand, IAEA, Dec 1977, p. 45

ACTIVITY--ARGENTINA RESOURCE RECOVERY
 CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 04 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
	Los Adobes Chabut	URAN	50 te/y	Plan		RANE

LATITUDE- DEG MIN LONGITUDE- DEG MIN

TECHNOLOGY SOURCE-

OWNER/OPERATOR-CNEA

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-CNEA- Comision Nacional de Energia Atomica

REFERENCES-

1-Uranium Resources, Production and Demand, IAEA, Dec 1977, p. 46

ACTIVITY--ARGENTINA FUEL FABRICATION
 CATEGORY-FUEL FABRICATION PLANTS

NUCLEAR FACILITY PROFILE
 SRM 03 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
Constituyentes Pilot Fuel Fab. Plant	Buenos Aires (Const. Atomic Cen.)	UO	50 te/yr	Oper	77	RARA
LATITUDE- 34 DEG 45 MIN S		LONGITUDE- 58 DEG 30 MIN W				

TECHNOLOGY SOURCE-

OWNER/OPERATOR-CNEA (Comision
 Nacional de Energia Atomica)

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-U-oxide fuel assemblies/Argentine power reactors

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-Construction began in 1975. Initial operation scheduled for
 1977 at 50 te/yr.

REMARKS-NEW FACILITY PLANS- Plans to expand capacity to 250 te/yr by
 1981, which will meet requirements of first two Argentine reactors
 and the initial core of the third.

REFERENCES-

- 1-IAEA; The Annual Report for 1976; 7/77
- 2-Nucl Eng Intl; Vol XXI, No 250; 11/76
- 3-NAC; Intl Data Collection and Analysis; Task 1, Vol I; 6/78

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ACTIVITY--ARGENTINA FUEL FABRICATION
CATEGORY--HEAVY WATER PRODUCTION

NUCLEAR FACILITY PROFILE
PSM 18 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
	Buenos Aires			Plan	84	RARF

LATITUDE- 34 DEG 40 MIN S

LONGITUDE- 58 DEG 30 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-CNEA

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-D2O

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-CNEA- Comision Nacional de Energia Atomica

REFERENCES-

- 1-International Data Collection and Analysis, NAC, 6/78, Task 1, Vol I, Argentina, p. 11
- 2-Mr. Santiago Harriague, CNEA, personal communication

ACTIVITY--ARGENTINA SPENT FUEL PROCESSING NUCLEAR FACILITY PROFILE
 CATEGORY-FUEL REPROCESSING FACILITIES SRM 25 JUL 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
Ezeiza Atomic Centre	Ezeiza	UM	(small)	Oper	77	RARG

LATITUDE- 34 DEG 50 MIN S

LONGITUDE- 58 DEG 40 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-National Atomic
 Energy Commission

SUPPLY SOURCE-

SAFEGUARDS-IAEA Safeguards
 Agreement

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-U-metal (research reactor fuel) reprocessing

SCHEDULE-Shut down for reactivation prior to 1977 when lab scale
 operation was resumed

REMARKS-Reactivation may have included redesign for low-enriched
 U-oxide fuel

REFERENCES-

- 1-Chayes, Abram and W. Bennett Lewis (eds); International
 Arrangements for Nuclear Fuel Reprocessing, 1977

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ACTIVITY--ARGENTINA RESEARCH & TEST REACTOR NUCLEAR FACILITY PROFILE
CATEGORY-RESEARCH AND TEST REACTORS DMK 30 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR CODE
RA-0	Cordoba			Oper	68 RARJ

LATITUDE- 31 DEG 12 MIN E

LONGITUDE- 64 DEG 12 MIN W

TECHNOLOGY SOURCE-Constructor:
CNEA

OWNER/OPERATOR-Owner: CNEA

SUPPLY SOURCE-

SAFEGUARDS-IAEA (non-NPT)

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-In operation

REMARKS-

REFERENCES-

- 1-Intl Data Collection and Analysis, Vol I, NAC, June 1978
- 2-Intl Atomic Energy Agency Bulletin, Vol XIX, No. 5, Oct. 1977

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ACTIVITY--ARGENTINA RESEARCH & TEST REACTOR NUCLEAR FACILITY PROFILE
CATEGORY--RESEARCH AND TEST REACTORS DMK 30 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR CODE
RA-1	Buenos Aires	TANK	.15 Mwt	Oper	58 RARK

LATITUDE- 34 DEG 40 MIN S LONGITUDE- 58 DEG 30 MIN W

TECHNOLOGY SOURCE-Constructor: OWNER/OPERATOR-Owner: CNEA

CNEA

SUPPLY SOURCE-

SAFEGUARDS-IAEA (non-NPT)

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-In operation; reactor critical: Feb. 1958

REMARKS-Reactor is based on the American Argonaut design

REFERENCES-

- 1-Intl Data Collection and Analysis, Vol I, NAC, June 1978
- 2-Intl Atomic Energy Agency Bulletin, Vol XIX, No 5, Oct. 1977
- 3-Intl Atomic Energy Agency Bulletin, Vol XIV, No 6, 1972

AR 11

ACTIVITY--ARGENTINA RESEARCH & TEST REACTOR NUCLEAR FACILITY PROFILE
CATEGORY--RESEARCH AND TEST REACTORS DMK 30 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
RA-2	Buenos Aires			Oper	58	RARL

LATITUDE- 34 DEG 40 MIN 5 LONGITUDE- 58 DEG 30 MIN W

TECHNOLOGY SOURCE-Constructor: OWNER/OPERATOR-Owner: CNEA
CNEA

SUPPLY SOURCE- SAFEGUARDS-IAEA (non-NPT)

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-In operation

REMARKS-

REFERENCES-

- 1-Intl Data Collection and Analysis, Vol I, NAC, June 1978
- 2-Intl Atomic Energy Agency Bulletin, Vol XIX, No 5, Oct. 1977

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ACTIVITY--ARGENTINA RESEARCH & TEST REACTOR NUCLEAR FACILITY PROFILE
CATEGORY--RESEARCH AND TEST REACTORS DMK 30 SEP 78

FACILITY NAME	LOCATION	FAC	TYPE	CAPACITY	STATUS	YR	CODE
RA-3	Buenos Aires		TANK	5 Mwt	Oper	67	RARM
See remarks	Ezeiza Atomic Center						

LATITUDE- 34 DEG 40 MIN S LONGITUDE- 58 DEG 30 MIN W

TECHNOLOGY SOURCE-Design & bldr: OWNER/OPERATOR-Ezeiza Atomic Center
Natl Atomic Energy Commission Natl Atomic Energy Commission
SUPPLY SOURCE- SAFEGUARDS-IAEA (Non-NPT)

PRODUCT/USE-Production of radioisotopes on a commercial scale. Wide ranging exp in nucl eng & the development & testing of nucl fuels
FUEL STORAGE CAPACITY-

PROCESS-Open tank, 90% enriched uranium, graphite reflected, demineralized water moderated and cooled
SCHEDULE-In operation; reactor critical: May 1967

REMARKS-Reactor name: Nucl. Research and Production Reactor RA-3
Neutron flux: Thermal av $4 \times (10 \text{ E } 13) \text{ n}/(\text{cm E } 2) \text{ sec}$

REFERENCES-

- 1-Directory of Nuclear Reactors, Vol X, IAEA, 1976, p. 327
- 2-Intl Atomic Energy Agency Bulletin, Vol XIX, No 5, Oct. 1977

ACTIVITY--ARGENTINA RESEARCH & TEST REACTOR NUCLEAR FACILITY PROFILE
 CATEGORY--RESEARCH AND TEST REACTORS DMK 30 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
RA-4	Rosario	SHRR		Oper	66	RARN

LATITUDE-	DEG	MIN	LONGITUDE-	DEG	MIN

TECHNOLOGY SOURCE-Constructor: CNEA
 OWNER/OPERATOR-Owner: CNEA

SUPPLY SOURCE- SAFEGUARDS-IAEA (non-NPT)

PRODUCT/USE-Training

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-In operation

REMARKS-This reactor was a gift from the Government of the Federal Republic of Germany.

REFERENCES-

- 1-Intl Data Collection and Analysis, Vol I, NAC, June 1978
- 2-Intl Atomic Energy Agency Bulletin, Vol XIX, No 5, Oct. 1977
- 3-Intl Atomic Energy Agency Bulletin, Vol XIV, No 6, 1972

ACTIVITY--ARGENTINA RESOURCE RECOVERY
 CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 01 AUG 78

FACILITY NAME LOCATION
 Don Otto
 Salta

FAC FAC
 TYPE CAPACITY STATUS YR CODE
 URAN 30 te/y Oper 83 RARQ

LATITUDE- DEG MIN

LONGITUDE- DEG MIN

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Comision Nacional de
 Energie Atomica (CNEA)

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-Expand to 60 te/yr in short term

REMARKS-

REFERENCES-

- 1-Uranium Resources, Production and Demand, IAEA, Dec 77, p. 46
- 2-Minerals Yearbook, 1974, Vol III, pp. 99-109

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ACTIVITY--ARGENTINA RESOURCE RECOVERY
CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 01 AUG 78

FACILITY NAME	LOCATION	FAC	FAC
	Sierra Pintada	TYPE CAPACITY	STATUS YR CODE
	Mendoza Province	URAN 600 te/y	Constr 83 RARR

LATITUDE- 34 DEG 35 MIN S LONGITUDE- 68 DEG 24 MIN W

TECHNOLOGY SOURCE- OWNER/OPERATOR-CNEA

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-Pit mining

SCHEDULE-125 te/y in 1980

REMARKS-near San Rafael
CNEA-Comision Nacional de Energíe Atomica

REFERENCES-

- 1-Mining Magazine, March 1978, p. 243
- 2-Uranium Resources, Production and Demand, IAEA, Dec. 1977, p. 46
- 3-Minerals Yearbook, 1974, Vol III, pp. 99-109

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ACTIVITY--ARGENTINA RESOURCE RECOVERY
CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 01 AUG 78

FACILITY NAME LOCATION
Malarque
Mendoza

FAC FAC
TYPE CAPACITY STATUS YR CODE
URAN 30 te/y Oper RARS

LATITUDE- 35 DEG 34 MIN S

LONGITUDE- 69 DEG 36 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-Expand to 160 te/y planned in short term

REMARKS-

REFERENCES-

1-Uranium Resources, Production and Demand, IAEA, Dec 77, p. 46

ACTIVITY--ARGENTINA RESOURCE RECOVERY NUCLEAR FACILITY PROFILE
 CATEGORY-MINES (URANIUM & THORIUM) PSM 14 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
	Sierra de Pichinan	URAN		Explor		RART

LATITUDE- DEG MIN LONGITUDE- DEG MIN

TECHNOLOGY SOURCE- OWNER/OPERATOR-CNEA

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-CNEA- Comision Nacional de Energia Atomica

REFERENCES-

- 1-Foreign Uranium Supply, EPRI EA-725, pp. 5-17
- 2-Uranium Resources, Production and Demand, IAEA, Dec 1977, p. 45

ACTIVITY--ARGENTINA RESEARCH & TEST REACTOR NUCLEAR FACILITY PROFILE
 CATEGORY-RESEARCH AND TEST REACTORS DMK 05 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
RA-5		FNRR		Constr	75	RARV

LATITUDE-	DEG	MIN	LONGITUDE-	DEG	MIN

TECHNOLOGY SOURCE-Constructor: OWNER/OPERATOR-Owner: CNEA
 CNEA

SUPPLY SOURCE- SAFEGUARDS-IAEA (non-NPT)

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

- 1-Intl Data Collection and Analysis, Vol I, NAC, June 1978
- 2-Intl Atomic Energy Agency Bulletin, Vol XIX, No 5, Oct 1977
- 3-Intl Atomic Energy Agency Bulletin, Vol XIV, No 6, 1972

ACTIVITY--ARGENTINA RESOURCE RECOVERY
 CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 14 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
	Tonco-Amblayo	URAN		Explor		RARW
	Salta					

LATITUDE-	DEG	MIN	LONGITUDE-	DEG	MIN
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TECHNOLOGY SOURCE- OWNER/OPERATOR-CNEA

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-CNEA- Comision Nacional de Energia Atomica

REFERENCES-

1-Uranium Resources, Production and Demand, IAEA, Dec 1977, p. 44

ACTIVITY--ARGENTINA RESOURCE RECOVERY
 CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 14 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
	Conquin Cordoba	URAN		Explor		RARX

LATITUDE- DEG MIN LONGITUDE- DEG MIN

TECHNOLOGY SOURCE-

OWNER/OPERATOR-

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-CNEA- Comision Nacional de Energia Atomica

REFERENCES-

1-Uranium Resources, Production and Demand, IAEA, Dec 1977, p 44

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ACTIVITY--ARGENTINA RESOURCE RECOVERY
CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 14 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
	Sano Gasta La Rioja					RARY

LATITUDE- 29 DEG 30 MIN S LONGITUDE- 67 DEG 30 MIN W

TECHNOLOGY SOURCE- OWNER/OPERATOR-CNEA

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-CNEA-Comision Nacional de Energia Atomica

REFERENCES-

1-Uranium Resources, Production and Demand, IAEA, Dec 1977, p. 44

ACTIVITY--ARGENTINA RESOURCE RECOVERY
 CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 14 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
	Guandacol La Rioja	URAN		Explor		RARZ

LATITUDE- 29 DEG 32 MIN S

LONGITUDE- 68 DEG 37 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-CNEA

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-CNEA- Comision Nacional de Energia Atomica

REFERENCES-

1-Uranium Resources, Production and Demand, IAEA, Dec 1977, p. 44

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ACTIVITY--AUSTRALIA RESOURCE RECOVERY
CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 11 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
	Maureen Queensland	URAN		Explor		RASA

LATITUDE- 19 DEG MIN S LONGITUDE-144 DEG MIN E

TECHNOLOGY SOURCE- OWNER/OPERATOR-Central Coast
Exploration-51%, Getty Oil-49%

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-Reserves- 3600 tonnes at 0.15% average grade

REFERENCES-

- 1-Mining Engineering, Vol XXIX, #1, 1/77, pp. 16-25
- 2-Uranium Resources, Production and Demand, IAEA, Dec 1977, pp. 47-52
- 3-Foreign Uranium Supply, EPRI EA-725, 4/78, pp. 2-1 to 2-59
- 4-International Data Collection and Analysis, NAC, Task 1, Vol I, June 1978, Australia

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ACTIVITY--AUSTRALIA RESOURCE RECOVERY
CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 11 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
	Ben Lomond Queensland	URAN		Explor		RASB

LATITUDE- 19 DEG 13 MIN S

LONGITUDE-146 DEG 48 MIN E

TECHNOLOGY SOURCE-

OWNER/OPERATOR--Minatome SA

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE--Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

1-Australian Atomic Energy Commission, 25th Annual Report, 2/78
pp. 39-42

ACTIVITY--AUSTRALIA RESOURCE RECOVERY NUCLEAR FACILITY PROFILE
 CATEGORY-MINES (URANIUM & THORIUM) PSM 12 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
	Ngalia Basin	URAN		Explor		RASC
	Northern Territory					
LATITUDE- 23 DEG	MIN S	LONGITUDE-	133 DEG	MIN	E	

TECHNOLOGY SOURCE- OWNER/OPERATOR-Joint venture (see remarks)

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-The Australian Atomic Energy Commission has an interest in the joint venture with Central Pacific Minerals NL, Magellan Petroleum Australia Pty Ltd, Agip Nucleare Australia Pty Ltd, and Urangesellschaft mbH and Co. KG

Two main deposits have been defined: Bigrlyi and Walbiri

REFERENCES-

- 1-Mining Engineering, Vol XXIX, #1, 1/77, pp. 16-25
- 2-International Data Collection and Analysis, NAC, June 1978, Task 1, Vol I, Australia, p. 12-33
- 3-Foreign Uranium Supply, EPRI EA-725, 4/78, pp. 2-1 to 2-59
- 4-Australian Atomic Energy Commission, 25th Annual Report, 2/78, pp. 39-42

ACTIVITY--AUSTRALIA RESOURCE RECOVERY
 CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 12 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
	Beverley	URAN		Explor		RASD
	South Australia					

LATITUDE- 31 DEG MIN S LONGITUDE-139 DEG MIN E

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Western Nuclear Inc.
 and Oilmin N.L.

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-Operation may begin in 1983 (contingent of gov't policy)

Anticipated output: 1200 te/y

REMARKS-Estimated reserves: 10000 tonnes at 0.24% grade

REFERENCES-

- 1-Mining Magazine, Dec 1977, pp. 651-658
- 2-International Data Collection and Analysis, NAC, June 1978,
 Task 1, Vol I, Australia, p. 12-33
- 3-Uranium Resources, Production and Demand, IAEA, Dec 1977,
 pp. 47-52
- 4-Foreign Uranium Supply, EPRI EA-725, 4/78, pp. 2-1 to 2-59
- 5-Mining Magazine, March 1978, pp. 233 & 247-248

ACTIVITY--AUSTRALIA ENRICHMENT PLANTS
 CATEGORY-ENRICHMENT PLANTS

NUCLEAR FACILITY PROFILE
 SRM 21 JUL 78

FACILITY NAME:	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
Lucas Heights Research Est.	Lucas Heights (Sutherland, NSW)	CENT		Oper	65	RASE
LATITUDE- 34 DEG 02 MIN S		LONGITUDE-151 DEG 06 MIN E				

TECHNOLOGY SOURCE-Australia

OWNER/OPERATOR-

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-No significant U235 enriched uranium output

FUEL STORAGE CAPACITY-

PROCESS-Gaseous centrifuge

SCHEDULE-Currently in operation as research and development facility
 used to test single machine design. Some experimental cascade work.

REMARKS-Construction of a pilot plant is under consideration as
 uranium enrichment has high priority in Australia

REFERENCES-

- 1-Levin, S. A. and S. Blumkin; Enrichment Suply and Technology
 Outside the United States; 1/13/77
- 2-Nonproliferation Issues; Hearings, Subcommittee on Arms Control,
 Committee on Foreign Relations; U.S. Senate, 94th Congress;
 Published 1977

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ACTIVITY--AUSTRALIA RESOURCE RECOVERY
CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 12 SEP 78

FACILITY NAME

LOCATION

FAC

FAC

TYPE CAPACITY STATUS YR CODE
URAN Inactv 61 RASF

LATITUDE- 32 DEG 30 MIN S

LONGITUDE-140 DEG 32 MIN E

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Government

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-Production began in 1954, averaging 120 te/y

REMARKS-

REFERENCES-

1-Foreign Uranium Supply, EPRI EA-725, 4/78, pp. 2-1 to 2-59

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ACTIVITY--AUSTRALIA ENRICHMENT PLANTS
CATEGORY--ENRICHMENT PLANTS

NUCLEAR FACILITY PROFILE
SRM 24 JUL 78

FACILITY NAME	LOCATION	FAC TYPE LASR	CAPACITY	STATUS R&D	YR R&D	FAC CODE RASH
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LATITUDE-	DEG	MIN	LONGITUDE-	DEG	MIN
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TECHNOLOGY SOURCE-

OWNER/OPERATOR-

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Small (milligram quantities) enrichment reported

FUEL STORAGE CAPACITY-

PROCESS-Laser isotope separation

SCHEDULE-Research and development in progress

REMARKS-

REFERENCES-

1-Wilcox, Wm J. Jr.; Uranium Enrichment- A Review of the
Present World Status: Capacity, Technology, and Plans; 5/6/77

ACTIVITY--AUSTRALIA RESOURCE RECOVERY
 CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 13 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
	Flinders Range	URAN		Explor		RASJ
	South Australia					
LATITUDE- 32 DEG	MIN S	LONGITUDE-138 DEG		MIN E		

TECHNOLOGY SOURCE-

OWNER/OPERATOR-

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

- 1-Uranium Resources, Production and Demand, IAEA, Dec 1977,
pp. 47-52
- 2-Foreign Uranium Supply, EPRI EA-725, 4/78, pp. 2-1 to 2-59

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ACTIVITY--AUSTRALIA RESOURCE RECOVERY
CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 30 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
Lake Way	Wiluna			Expior		RASK

LATITUDE- 26 DEG 37 MIN S LONGITUDE-120 DEG 12 MIN E

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Van, Delhi Inter-
national Oil, and Wyoming Mineral

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Open pit mining/mill

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-Reserves: 4000 te average ore grade: 0.075%

REFERENCES-

- 1-International Data Collection and Analysis, NAC, June 1978, Task 1, Vol I, Australia, pp. 12-33
- 2-Foreign Uranium Supply, EPRI EA-725, 4/78, pp. 2-1 to 2-59
- 3-Mining Magazine, March 1978, pp. 233 & 247-248
- 4-Australia Atomic Energy Commission, 25th Annual Report, 2/78, pp. 39-42

ACTIVITY--AUSTRALIA RESOURCE RECOVERY
 CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 30 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
Olympic Dam		URAN		Explor		RASL
Rox by Downs	South Australia					
LATITUDE-	DEG	MIN	LONGITUDE-	DEG	MIN	

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Western Mining Corp.

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-Open pit

SCHEDULE-

REMARKS-

REFERENCES-

- 1-International Data Collection and Analysis, NAC, June 1978, Task 1, Vol I, Australia, pp. 12-33
- 2-Mining Magazine, March 1978, pp. 233 & 247-248
- 3-Australian Atomic Energy Commission, 25th Annual Report, 2/78, pp. 39-42

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ACTIVITY--AUSTRALIA RESOURCE RECOVERY
CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 13 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
Honeymoon	Honeymoon South Australia	URAN		Explor		RASM
LATITUDE- 32 DEG	MIN S	LONGITUDE-140 DEG		MIN E		

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Minad, Teton Explor-
ation Co.

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-Minad- Mines Administration Proprietary
Reserves: 2000 tonnes

REFERENCES-

1-Uranium Resources, Production and Demand, IAEA, Dec 1977,
pp. 47-52

2-Foreign Uranium Supply, EPRI EA-725, 4/78, pp. 2-1 to 2-59

ACTIVITY--AUSTRALIA RESEARCH & TEST REACTOR NUCLEAR FACILITY PROFILE
 CATEGORY--RESEARCH AND TEST REACTORS DMK 30 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
High Flux Australian Reactor	Sutherland, Lucas Hts.	TANK	10 Mwt	Oper	58	RAUE

LATITUDE- 34 DEG 02 MIN S LONGITUDE-151 DEG 06 MIN E

TECHNOLOGY SOURCE-Design: UKAEA OWNER/OPERATOR-Australian Atomic
 Bldr:Head Wrightson Processes Ltd Energy Commission
 SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Isotope production, neutron physics and materials
 irradiation
 FUEL STORAGE CAPACITY-

PROCESS-Tank type, highly enriched (93%) uranium, heavy water
 moderated and cooled, graphite and heavy water reflected
 SCHEDULE-In operation at 10 MW; Start of construction: Oct 1955;
 Reactor critical: Jan 1958
 REMARKS-Reactor is identical to the Dido Reactor

REFERENCES-

1-Directory of Nuclear Reactors, Vol II, IAEA, 1959, p. 287

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ACTIVITY--AUSTRALIA RESEARCH & TEST REACTOR NUCLEAR FACILITY PROFILE
CATEGORY--RESEARCH AND TEST REACTORS DMK 30 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
Moata Reactor	Lucas Heights New South Wales	ARGO	.01 MWt	Oper	61	RAUH

LATITUDE- 34 DEG 02 MIN S LONGITUDE-151 DEG 06 MIN E

TECHNOLOGY SOURCE-See remarks OWNER/OPERATOR-Australian Atomic
Energy Commission

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Neutron source reactor for lattice and spectrum studies on
core assemblies

FUEL STORAGE CAPACITY-

PROCESS-Argonaut (UTR-10) type, highly enriched (90%) uranium, light
water moderated and cooled, graphite reflected

SCHEDULE-In operation; start of construction: Nov. 1960; critical:
April 1961; full power operation: March 1962

REMARKS-Designer and builder: Advanced Technology Laboratories,
Division of American Radiator & Standard Sanitary Corp.
Moata is similar to the UTR-10 reactor at Virginia Polytechnic
Inst.

Neutron flux: Thermal max $1.46 \times (10^E 11)n/(cm^E 2)sec$; Fast max
(accessible): $(10^E 10)n/(cm^E 2)sec$

REFERENCES-

1-Directory of Nuclear Reactors, Vol V, IAEA, 1964, p. 151

ACTIVITY--AUSTRALIA RESOURCE RECOVERY NUCLEAR FACILITY PROFILE
 CATEGORY-MINES (URANIUM & THORIUM) PSM 12 SEP 78

FACILITY NAME	LOCATION	FAC	FAC
	Yeelirrie	TYPE CAPACITY STATUS YR CODE	
	Western Australia	URAN 2300te/y Plan 84 RAUL	

LATITUDE- 27 DEG MIN S LONGITUDE-118 DEG MIN E

TECHNOLOGY SOURCE- OWNER/OPERATOR-Western Mining Corp.

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-Open pit mining; milling will also occur here

SCHEDULE-Pilot plant may be operational by 1980. Production goal:
3000 te/y

REMARKS-Estimated reserves: 46500 tonnes at average grade of 0.15%
Yeelirre means "to die" in the Aborigine language

REFERENCES-

- 1-Wall Street Journal, 16 Aug 1978, p. 6
- 2-Mining Magazine, Dec 1977, pp. 651-658
- 3-Mining Engineering, Vol XXIX, #1, 1/77, pp. 16-25
- 4-International Data Collection and Analysis, NAC, June 1978,
Task 1, Vol I, Australia, pp. 12-33
- 5-Uranium Resources, Production and Demand, IAEA, Dec 1977,
pp. 47-52
- 6-Foreign Uranium Supply, EPRI EA-725, 4/78, pp. 2-1 to 2-59
- 7-Mining Magazine, March 1978, pp. 233 & 247-248
- 8-Australian Atomic Energy Commission, 25th Annual Report, 2/78,
pp. 39-42

ACTIVITY--AUSTRALIA RESOURCE RECOVERY
 CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 13 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
Jabirv	Ranger Northern Territory	URAN	3000te/y	Plan	81	RAUM

LATITUDE- 12 DEG 30 MIN S LONGITUDE-133 DEG MIN E

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Peko-EZ, AAEC

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-Open pit mining

SCHEDULE-Construction to start in late 1978, 3000 te/y capacity by '81 and possible 6000 te/y in mid 80s. All contingent on gov't approval.

REMARKS-Estimated reserves: 100000 tonnes, average ore grade- 0.25%

Peko-EZ- Peko-Wallsend Ltd (25%), Electrolytic Zinc Company of Australia Ltd (25%)

AAEC- Australian Atomic Energy Commission (50%)

REFERENCES-

1-Mining Magazine, Dec 1977, p. 651-658

2-International Data Collection and Analysis, NAC, June 1978, Task 1 Vol I, Australia, pp. 12-33

3-Uranium Resources, Production and Demand, IAEA, Dec 1977, pp. 47-52

4-Foreign Uranium Supply, EPRI EA-725, 4/78, pp. 2-1 to 2-59

5-Mining Magazine, March 1978, pp. 233 & 247-248

6-Australian Atomic Energy Commission, 25th Annual Report, 2/78,

ACTIVITY--AUSTRALIA RESOURCE RECOVERY
 CATEGORY-MILLS

NUCLEAR FACILITY PROFILE
 PSM 13 SEP 78

FACILITY NAME	LOCATION	FAC	FAC
Jabiru	Ranger	URAN 3000te/y	Plan 82 RAUN
	Northern Territory		

LATITUDE- 12 DEG 30 MIN S LONGITUDE-133 DEG MIN E

TECHNOLOGY SOURCE- OWNER/OPERATOR-Peko-EZ, AAEC

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-Construction to start in late '78; 3000 te/y capacity by '82; possible 6000 te/y in mid 80s. All contingent on gov't approval.

REMARKS-Peko-EZ- Peko-Wallsend Ltd (25%), Electrolytic Zinc Company of Australasia Ltd (25%)

AAEC- Australian Atomic Energy Commission (50%)

REFERENCES-

- 1-Mining Magazine, Dec 1977, pp. 651-658
- 2-International Data Collection and Analysis, NAC, June 1978, Task 1, Vol I, Australia, pp. 12-33
- 3-Uranium Resources, Production and Demand, IAEA, Dec 1977, pp. 47-52
- 4-Foreign Uranium Supply, EPRI EA-725, 4/78, pp. 2-1 to 2-59
- 5-Mining Magazine, March 1978, pp. 233 & 247-248
- 6-Australian Atomic Energy Commission, 25th Annual Report, 2/78, pp. 39-42

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ACTIVITY--AUSTRALIA RESOURCE RECOVERY NUCLEAR FACILITY PROFILE
CATEGORY-MINES (URANIUM & THORIUM) PSM 13 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR CODE
	Alligator Rivers Northern Territory	URAN		Explor	RAUP

LATITUDE- 12 DEG 30 MIN S LONGITUDE-133 DEG MIN E

TECHNOLOGY SOURCE- OWNER/OPERATOR-Peko-Wallsend Ltd
Electolytic Zinc Co
SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-Exploration suspended pending gov't decision regarding pro-
posed national park and Aborigine tribal land use

REMARKS-Proven reserves: 335000 tonnes
Development of Jabiluka, Ranger, Koongarra, and Naberlek deposits
already underway

REFERENCES-

- 1-Mining Magazine, Dec 1977, pp. 651-658
- 2-Mining Engineering, Vol XXIX, #1, 1/77, pp. 16-25
- 3-Uranium Resources, Production and Demand, IAEA, Dec 1977,
pp. 47-52
- 4-Foreign Uranium Supply, EPRI EA-725, 4/78, pp. 2-1 to 2-59
- 5-Mining Magazine, March 1978, pp. 233 & 247-248
- 6-Australian Atomic Energy Commission, 25th Annual Report, 2/78,
pp. 39-42

ACTIVITY--AUSTRALIA RESOURCE RECOVERY
 CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 13 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR CODE
	Koongarra Northern Territory		1500te/y	Plan	RAUQ
LATITUDE-	12 DEG 30 MIN S	LONGITUDE-	133 DEG	MIN E	

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Noranda Australia
 Ltd.

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-Open pit mine/mill

SCHEDULE-Deposit lies within boundaries of Kakadu National Park and the
 Fox report advises against development

REMARKS-Reserves- 30,000 tonnes at average grade of 0.34%

REFERENCES-

- 1-Mining Magazine, Dec 1977, pp. 651-658
- 2-Mining Engineering, Vol XXIX, #1, 1/77, pp. 16-25
- 3-International Data Collection and Analysis, NAC, June 1978,
 Task 1, Vol I, Australia, p. 3
- 4-Uranium Resources, Production and Demand, IAEA, Dec 1977,
 pp. 47-52
- 5-Foreign Uranium Supply, EPRI EA-725, 4/78, pp. 2-1 to 2-59
- 6-Australian Atomic Energy Commission, 25th Annual Report, 2/78,
 pp. 39-42

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ACTIVITY--AUSTRALIA RESOURCE RECOVERY
CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 13 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
	Nabarlek Northern Territory	URAN	900 te/y	Plan	81	RAUR

LATITUDE- 12 DEG 30 MIN S LONGITUDE-133 DEG MIN E

TECHNOLOGY SOURCE- OWNER/OPERATOR-Queensland Mines Ltd

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-Open pit mine

SCHEDULE-Awaiting solidification of government policy

REMARKS-Reserves: 9100 tonnes at 2.3% grade

REFERENCES-

- 1-Mining Magazine, Dec 1977, pp. 651-658
- 2-Mining Engineering, Vol XXIX, #1, 1/77, pp. 16-25
- 3-International Data Collection and Analysis, NAC, June 1978, Task 1, Vol 1, Australia, pp. 12-33
- 4-Uranium Resources, Production and Demand, IAEA, Dec 1977, pp. 47-52
- 5-Foreign Uranium Supply, EPRI EA-725, 4/78, pp. 2-1 to 2-59
- 6-Australian Atomic Energy Commission, 25th Annual Report, 2/78, pp. 39-42

ACTIVITY--AUSTRALIA RESOURCE RECOVERY
 CATEGORY-MILLS

NUCLEAR FACILITY PROFILE
 PSM 13 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
	Nabarlek Northern Territory	URAN	900 te/y	Plan	81	RAUS

LATITUDE- 12 DEG 30 MIN S LONGITUDE-133 DEG MIN E

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Queensland Mines Ltd

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-Acid leach solvent

SCHEDULE-Awaiting government approval

REMARKS-

REFERENCES-

- 1-Mining Magazine, Dec 1977, pp. 651-658
- 2-Mining Engineering, Vol XXIX, #1, 1/77, pp. 16-25
- 3-International Data Collection and Analysis, NAC, June 1978,
Task 1, Vol I, Australia, pp. 12-33
- 4-Uranium Resources, Production and Demand, IAEA, Dec 1977,
pp. 47-52
- 5-Foreign Uranium Supply, EPRI EA-725, 4/78, pp. 2-1 to 2-59
- 6-Australian Atomic Energy Commission, 25th Annual Report, 2/78,
pp. 39-42

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ACTIVITY--AUSTRALIA RESOURCE RECOVERY
CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 13 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
	Jabiluka	URAN	2500te/y	Plan	83	RAUT
	Northern Territory					

LATITUDE- 12 DEG 30 MIN S LONGITUDE-133 DEG MIN E

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Pancontinental
Mining Ltd &

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-Open pit mining/mill

SCHEDULE-Operations tentative pending government decision

REMARKS-Reserves: 207000 tonnes

REFERENCES-

- 1-Mining Magazine, Dec 1977, pp. 651-658
- 2-Mining Engineering, Vol XXIX, #1, 1/77, pp. 16-25
- 3-International Data Collection and Analysis, NAC, June 1978, Task 1, Vol I, Australia, pp. 12-33
- 4-Uranium Resources, Production and Demand, IAEA, Dec 1977, pp. 47-52
- 5-Foreign Uranium Supply, EPRI EA-725, 4/78, pp. 2-1 to 2-59
- 6-Australian Atomic Energy Commission, 25th Annual Report, 2/78, pp. 39-42

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ACTIVITY--AUSTRALIA RESOURCE RECOVERY
CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 13 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
	Westmoreland Queensland	URAN		Explor		RAUU

LATITUDE- 17 DEG 20 MIN S

LONGITUDE-137 DEG 40 MIN E

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Queensland Mines and
Urangesellschaft

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-Estimated reserves: 2700 at average grade of 0.16%

REFERENCES-

- 1-International Data Collection and Analysis, NAC, June 1978,
Task 1, Vol I, Australia, pp. 12-33
- 2-Foreign Uranium Supply, EPRI EA-725, 4/78, pp. 2-1 to 2-59
- 3-Australian Atomic Energy Commission, 25th Annual Report, 2/78
pp. 30-42

ACTIVITY--AUSTRALIA RESOURCE RECOVERY
 CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 13 SEP 78

FACILITY NAME LOCATION
 Mary Kathleen Mt. Isa
 Queensland

FAC FAC
 TYPE CAPACITY STATUS YR CODE
 URAN 700 te/y Oper 56 RAUV

LATITUDE- 20 DEG 50 MIN S

LONGITUDE-139 DEG 29 MIN E

TECHNOLOGY SOURCE-

OWNER/OPERATOR-MKU

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-Open pit

SCHEDULE-Mine was closed from 1964 to 1975 for revamping

REMARKS-Kathleen Investments Ltd-2.7%

Production: 1976: 322 tonnes, 1977: 412 tonnes, 1956-1963: 4000 te
 Production has been hampered by a myriad of problems, including
 equipment, weather, and staff shortages
 Estimated resources: 7000 te

REFERENCES-

- 1-International Data Collection and Analysis, NAC, June 1978,
 Task 1, Vol I, Australia, pp. 12-33
- 2-Uranium Resources, Production and Demand, IAEA, Dec 1977,
 pp. 47-52
- 3-Foreign Uranium Supply, EPRI EA-725, 4/78, pp. 2-1 to 2-59
- 4-Mining Magazine, March 1978, pp. 233 & 247-248
- 5-Australian Atomic Energy Commission, 25th Annual Report, 2/78,
 pp. 39-42
- 6-Mining Magazine, Dec 1977, pp. 651-658
- 7-Mining Engineering, Vol XXIX, #1, 1/77, pp. 16-25

ACTIVITY--AUSTRALIA RESOURCE RECOVERY
 CATEGORY-MILLS

NUCLEAR FACILITY PROFILE
 PSM 13 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
Mary Kathleen	Mt. Isa Queensland	URAN	700 te/y	Oper	56	RAUW

LATITUDE- 20 DEG 50 MIN S

LONGITUDE-139 DEG 29 MIN E

TECHNOLOGY SOURCE-

OWNER/OPERATOR-MKU

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-Acid leach, solvent extraction

SCHEDULE-Facility was closed from 1964 to 1975

REMARKS-Kathleen Investments Ltd- 2.7%
 MKU-Mary Kathleen Uranium

REFERENCES-

- 1-Mining Magazine, Dec 1977, pp. 651-658
- 2-Mining Engineering, Vol XXIX, #1, 1/77, pp. 16-25
- 3-International Data Collection and Analysis, NAC, June 1978,
 Task 1, Vol I, Australia, pp. 12-33
- 4-Uranium Resources, Production and Demand, IAEA, Dec 1977,
 pp. 47-52
- 5-Foreign Uranium Supply, EPRI EA-725, 4/78, pp. 2-1 to 2-59
- 6-Australian Atomic Energy Commission, 25th Annual Report, 2/78,
 pp. 39-42

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ACTIVITY--AUSTRALIA RESOURCE RECOVERY
CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 11 SEP 78

FACILITY NAME

LOCATION

FAC

FAC

Rum Jungle

TYPE CAPACITY STATUS YR CODE
URAN 200 te/y Inactv 71 RAUX

Northern Territory

LATITUDE- 13 DEG 00 MIN S

LONGITUDE-130 DEG 58 MIN E

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Consolidated Zinc
Proprietary

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-From 1963 until 1971 production was channeled
to a stockpile of 2000 tonnes located at Lucas Heights
PROCESS-

SCHEDULE-Mine/mill began operation in Sept. 1954

REMARKS-

REFERENCES-

1-Foreign Uranium Supply, EPRI EA-725, 4/78, pp. 2-1 to 2-59

ACTIVITY--AUSTRALIA RESOURCE RECOVERY
 CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 13 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
South Alligator	Northern Territory	URAN		Inactv	62	RAUY

LATITUDE- 13 DEG MIN S

LONGITUDE-132 DEG 30 MIN E

TECHNOLOGY SOURCE-

OWNER/OPERATOR-South Alligator
 Uranium NL

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-Total production: 150 tonnes

REFERENCES-

1-Foreign Uranium Supply, EPRI EA-725, 4/78, pp. 2-1 to 2-59

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ACTIVITY--AUSTRALIA RESOURCE RECOVERY
CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 13 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
El Sherana	El Sharana Northern Territory	URAN		Inactv	65	RAUZ

LATITUDE- 13 DEG 35 MIN S LONGITUDE-132 DEG 38 MIN E

TECHNOLOGY SOURCE- OWNER/OPERATOR-United Uranium NL

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-Total production: 710 tonnes, including a 1-tonne pitchblende specimen, on display at the Institute of Geological Sciences, London

REFERENCES-

1-Foreign Uranium Supply, EPRI EA-725, 4/78, pp. 2-1 to 2-59

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ACTIVITY--AUSTRIA RESEARCH AND TEST REACTOR NUCLEAR FACILITY PROFILE
CATEGORY--RESEARCH AND TEST REACTORS DMK 30 SEP 78

FACILITY NAME	LOCATION	FAC	TYPE	CAPACITY	STATUS	YR CODE	FAC
ASTRA Adapted Swim.	See remarks		POOL	Remarks	Oper	60	RATE

LATITUDE-	DEG	MIN	LONGITUDE-	DEG	MIN
-----------	-----	-----	------------	-----	-----

TECHNOLOGY SOURCE--AMF Atomics, Div. OWNER/OPERATOR--Siebersdorf Research
of Amer. Mach & Foundry Co Center
SUPPLY SOURCE-- SAFEGUARDS--

PRODUCT/USE--Research in neutron physics, isotope production,
engineering tests

FUEL STORAGE CAPACITY--Irradiated fuel storage: Storage racks for 30
fuel elements

PROCESS--Pool-type, highly enriched (>90%) uranium, light water
cooled and moderated, graphite & water reflected

SCHEDULE--In operation; start of construction: Nov 1958;
critical: Sept. 1960

REMARKS--CAPACITY: 5MW convertible to 12Mwt. Location: Seibersdorf,
Niederösterreich

Neutron flux: Thermal av $4.3 \times (10 \text{ E } 13) \text{ n}/(\text{cm E } 2) \text{ sec}$; Thermal max
 $(10 \text{ E } 14) \text{ n}/(\text{cm E } 2) \text{ sec}$; Fast av. $9.1 \times (10 \text{ E } 13) \text{ n}/(\text{cm E } 2) \text{ sec}$; Fast
max $1.8 \times (10 \text{ E } 14) \text{ n}/(\text{cm E } 2) \text{ sec}$

Critical mass: 3.2 Kg U-235 for water reflec. core, 2.285 Kg U-235
for water & graphite reflec. core. Core loading at rated power:

4.018 Kg U-235 Av. specific power in fuel: 1245 KW/Kg U-235
Fuel loading and unloading: Manual

REFERENCES--

- 1-Directory of Nuclear Reactors, Vol VI, IAEA, 1966, p. 9
- 2-Intl Data Collection and Analysis, Vol I, NAC, June 1978

ACTIVITY--AUSTRIA RESEARCH AND TEST REACTOR NUCLEAR FACILITY PROFILE
 CATEGORY--RESEARCH AND TEST REACTORS DMK 30 SEP 78

		FAC		FAC
FACILITY NAME	LOCATION	TYPE	CAPACITY	STATUS YR CODE
Sar-Graz	Graz	ARGO	.001 MWt	Oper 65 RATH
See remarks	Reaktorinstitut			
LATITUDE-	47 DEG 05 MIN N	LONGITUDE-	15 DEG 22 MIN E	

TECHNOLOGY SOURCE-Germany (Siemens OWNER/OPERATOR-See remarks
 Schuckertwerke A.G.)

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Materials testing, reactor and nuclear physics, training

FUEL STORAGE CAPACITY-Irradiated fuel: 18 storage holes in concrete

PROCESS-Argonaut-type, highly enriched (20%) uranium, light water
 moderated and cooled, graphite reflected

SCHEDULE-In operation; start of construction: Spring 1962;
 reactor critical: May 1965

REMARKS-Sar-Graz=Siemens Argonaut Reactor Graz

Owner/Operator: Verein zur Forderung der Anwendung der Kernenergie,
 Graz

Neutron flux: $6.5 \times (10^9) \text{ n}/(\text{cm}^2 \text{ sec})$

Av. specific power in fuel: 0.5 KW/Kg U-235 for one slab core, .227
 KW/Kg U-235 for annular core

REFERENCES-

1-Directory of Nuclear Reactors, Vol VI, IAEA, 1966, p. 113

ACTIVITY--AUSTRIA RESEARCH AND TEST REACTOR NUCLEAR FACILITY PROFILE
 CATEGORY--RESEARCH AND TEST REACTORS DMK 30 SEP 78

		FAC		FAC
FACILITY NAME	LOCATION	TYPE	CAPACITY	STATUS YR CODE
Triga Mark II Reactor	Vienna	SHRR	25 Mwt	Oper 62 RATK

LATITUDE- 49 DEG 13 MIN N LONGITUDE- 16 DEG 22 MIN E

TECHNOLOGY SOURCE-Design & Bldr: Gen Atomic Div of Gen Dynamics
 OWNER/OPERATOR-Owned by Federal Ministry of Education
 SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Neutron & solid state physics, engineering tests,
 medicine, chemistry, isotope prod., educational purposes
 FUEL STORAGE CAPACITY-

PROCESS-Solid homogeneous, highly enriched (20%) uranium, zirconium hy-
 dride & light water moderated, light water cooled, graphite reflected

SCHEDULE-Start of construction: Aug 1959;
 Anticipated completion date: late 1960

REMARKS-Operated by: Atominstitut der Oesterreichischen Hochschulen.
 This reactor is identical in its main parts with the Triga Rsch
 Reactor, John Hopkins, Lab., Cal. (Prototype) Reference 2: Owner:
 Technical University of Vienna.
 Austria has no domestic fuel cycle facilities and none are planned.

REFERENCES-

- 1-Directory of Nuclear Reactors, Vol II, IAEA, 1959, p. 241
- 2-Intl Data Collection and Analysis, Vol I, NAC, June 1978

ACTIVITY--AUSTRIA RESOURCE RECOVERY NUCLEAR FACILITY PROFILE
 CATEGORY-MINES (URANIUM & THORIUM) PSM 14 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR CODE
	Forstau	URAN		Explor	RATP
	Salzburg Province				
LATITUDE- DEG MIN		LONGITUDE- DEG MIN			

TECHNOLOGY SOURCE- OWNER/OPERATOR-Federal Government

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-Average ore grade: 0.08%
 Resources are substantial and reserves large. When the mines are developed deposits should be economic. (Quasi-economic now)

REFERENCES-

- 1-Uranium Resources, Production and Demand, IAEA, Dec 1977, pp. 52-53

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ACTIVITY--AUSTRIA RESOURCE RECOVERY
CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 14 AUG 78

FACILITY NAME LOCATION
Tweng
Salzburg

FAC FAC
TYPE CAPACITY STATUS YR CODE
URAN Explor RATQ

LATITUDE- 47 DEG 12 MIN N

LONGITUDE- 1 DEG 37 MIN E

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Federal Government

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-Resources are substantial and reserves large. When the mines
are developed deposits should be economic. (Quasi-economic now)

REFERENCES-

1-Uranium Resources, Production and Demand, IAEA, Dec 1977,
pp. 52-53

ACTIVITY--BELGIUM RESEARCH AND TEST REACTOR NUCLEAR FACILITY PROFILE
 CATEGORY-RESEARCH AND TEST REACTORS DMK 30 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR CODE
BR-02	Mol	TK-L	500Wt	Oper	59 RBEE

O-Power Mock-up

LATITUDE- 51 DEG 11 MIN N

LONGITUDE- 5 DEG 07 MIN E

TECHNOLOGY SOURCE-Design:Nucl Dev OWNER/OPERATOR-Centre d'Etude de
 Corp of America & CEN; Bldr: CEN l'Energie Nucleaire (CEN) and SCK
 SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Mock up of the BR-2 reactor, design of core
 configurations

FUEL STORAGE CAPACITY-

PROCESS-Tank-type, highly enriched (90%) uranium, light water and
 beryllium moderated, LW cooled, LW and beryllium reflected

SCHEDULE-In operation; Start of construction: 1959;

Reactor critical: Dec 1959

REMARKS-Neutron flux: Thermal max $5 \times (10 \text{ E } 9) \text{ n/ (cm E } 2) \text{ sec}$;

Fast max $3.3 \times (10 \text{ E } 9) \text{ n/(cm E } 2) \text{ sec}$

Critical mass: 1220 g U-235

REFERENCES-

- 1-Directory of Nuclear Reactors, Vol VI, IAEA, 1966, p. 85
- 2-Intl Data Collection and Analysis, Vol I, NAC, June 1978

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ACTIVITY--BELGIUM RESEARCH & TEST REACTOR NUCLEAR FACILITY PROFILE
CATEGORY-RESEARCH AND TEST REACTORS DMK 30 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR CODE
BR-1	Mol		4 MWt	Oper	56 RBEF

LATITUDE- 51 DEG 11 MIN N LONGITUDE- 5 DEG 07 MIN E

TECHNOLOGY SOURCE-Constructor: CEN OWNER/OPERATOR-Owner: CEN/SCK

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-In operation

REMARKS-

REFERENCES-

1-Intl Data Collection and Analysis, NAC, Vol I, June 1978

ACTIVITY--BELGIUM RESEARCH AND TEST REACTOR NUCLEAR FACILITY PROFILE
 CATEGORY--RESEARCH AND TEST REACTORS DMK 30 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
Belgian Reactor BR-2	Mol	TK-L	100 Mwt	Oper	60	RBEG

LATITUDE- 51 DEG 11 MIN N LONGITUDE- 5 DEG 07 MIN E

TECHNOLOGY SOURCE-Design: Nucl Dev OWNER/OPERATOR-Centre d'Etude de
 Corp of Amer & CEN; Bldr: CEN l'Energie Nucleaire (CEN)
 SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Testing of materials and assemblies

FUEL STORAGE CAPACITY-Transfer chute for underwater passage of
 irradiated fuel (& other material to process equipment building)
 PROCESS-Tank type, fully enriched (90%) uranium, light water moderated
 and cooled, beryllium reflected

SCHEDULE-Start of Construction: Sept 1957
 Reactor Critical: 1960

REMARKS-Each channel has its separate nozzle on top of reactor for
 refueling. Normal Fresh Fuel Loading: 3.99 kg contained U--235

REFERENCES-

- 1-Directory of Nuclear Reactors, Vol II, IAEA, 1959, p. 131
- 2-International Data Collection and Analysis, Vol V, June 1978, NAC
- 3-Nuclear Reactor Plant Data, Vol II, Rsch and Test Reactor, 1959,
 Amer. Soc. of Mech. Engineers

ACTIVITY--BELGIUM FUEL FABRICATION
 CATEGORY--FUEL FABRICATION PLANTS

NUCLEAR FACILITY PROFILE
 SRM 08 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR CODE
Dessel Pu Fuel Prod.	Dessel	UPuO	35 te/yr	Oper	73 RBEH

LATITUDE- 51 DEG 14 MIN N

LONGITUDE- 5 DEG 07 MIN E

TECHNOLOGY SOURCE-

OWNER/OPERATOR--Belgonucleaire

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-U-Pu mixed-oxide pellets, and fuel rods/LWR and FBR
 testing and demonstration programs

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE--Currently in operation since 1973.

REMARKS--Capacity is 30-35 te/yr for light water reactor (LWR) fuel or
 4 te/yr for fast breeder reactor (FBR) fuel

PRODUCTION HISTORY-- Total of about 6.63 te of fuel produced up to
 1976 for research reactors, heavy water reactors, high temperature
 reactors, and fast reactors

CAPACITY LIMITATIONS-- Could be doubled within existing buildings
 but no expansion plans unless market develops

REFERENCES-

1-NAC; Intl Data Collection and Analysis; Task 1, Vol I; 6/78

ACTIVITY--BELGIUM SPENT FUEL PROCESSING
CATEGORY--FUEL REPROCESSING FACILITIES

NUCLEAR FACILITY PROFILE
 SRM 25 JUL 78

FACILITY NAME	LOCATION	FAC	FAC
Eurochemic	Mol	UMUO 60 te/yr	Inactv 66 RBEQ

LATITUDE- 51 DEG 11 MIN N

LONGITUDE- 5 DEG 07 MIN E

TECHNOLOGY SOURCE-Eurochemic
 Group

OWNER/OPERATOR-Eurochemic

SUPPLY SOURCE-

SAFEGUARDS-Euratom Safeguards
 Agreement

PRODUCT/USE-870 cubic meters high-level and 2000 cubic meters low-
 level waste; U235, Pu239 recovery not known

FUEL STORAGE CAPACITY-Storage pond-capacity unknown

PROCESS-U metal and U-oxide low-enriched fuel and metal high-enriched
 fuel reprocessing using Purex process

SCHEDULE-Currently on standby. Operated from 1966-1974 by Eurochemic
 at 60-85 te/yr low-enriched fuel and 1.25 te/yr high-enriched fuel

REMARKS-Eurochemic was organized by Austria, Belgium, Denmark, France,
 West Germany, Italy, Netherlands, Norway, Portugal, Spain, Sweden,
 Switzerland, and Turkey to reprocess spent fuel at Mol and to
 provide reprocessing technology for member nations. Plant is now on
 standby pending transfer to sole ownership by Belgian company-
 Belgoprocess. After some remodeling and reactivation, the plant
 will probably resume operation in 1982 or 1983 possibly at increased
 capacity of 300 te/yr. In its 8 years of operation, 181 tons of low-
 enriched and 30.6 tons of high-enriched fuel were processed

REFERENCES-

- 1-Chayes, Abram and W. Bennett Lewis; International Arrangements
 for Nuclear Fuel Reprocessing; 1977
- 2-Harmon, K. M.; Intl Source Book: A Compendium of Worldwide
 Programs in Nuclear Energy Supply and Radioactive Waste
 Management Research and Development; Vol I; 1/78

ACTIVITY--BELGIUM FUEL FABRICATION
 CATEGORY--FUEL FABRICATION PLANTS

NUCLEAR FACILITY PROFILE
 SRM 08 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR CODE
FBFC	Dessel	UO	200 te (te/yr)	Oper	59 RBER

LATITUDE- 51 DEG 14 MIN N

LONGITUDE- 5 DEG 07 MIN E

TECHNOLOGY SOURCE-Westinghouse
 Electric Corporation- US
 SUPPLY SOURCE-UO2 powder from
 BNFL (UK)

OWNER/OPERATOR-Eurofuel (80%), MMN
 (12%), Westinghouse (8%)
 SAFEGUARDS-

PRODUCT/USE-U-oxide fuel assemblies, UO2 pellets sent to FBFC
 facility in France
 FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-Currently in operation since 1959

REMARKS-MARKET STRATEGY- Both FBFC-Belgium and FBFC-France will
 attempt to control 100% of domestic markets in the future
 NEW FACILITY PLANS- Expansion to 400 te/yr capacity underway for
 completion in 1978. Further expansion will continue as needed

REFERENCES-

1-NAC; Intl Data Collection and Analysis; Task 1, Vol I; 6/78

BE 7

ACTIVITY--BELGIUM RESEARCH & TEST REACTOR NUCLEAR FACILITY PROFILE
CATEGORY--RESEARCH AND TEST REACTORS DMK 30 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
Thetis	Ghent		41 Mwt	Oper	67	RBET

LATITUDE- DEG MIN LONGITUDE- DEG MIN

TECHNOLOGY SOURCE-Constructor: OWNER/OPERATOR-Owner: Univ of Ghent
Belgonucleaire

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-In operation

REMARKS-

REFERENCES-

1-Intl Data Collection and Analysis, Vol I, NAC, June 1978

ACTIVITY--BELGIUM RESEARCH AND TEST REACTOR NUCLEAR FACILITY PROFILE
 CATEGORY-RESEARCH AND TEST REACTORS DMK 30 SEP 78

FACILITY NAME	LOCATION	FAC	FAC
VENUS	Mol	TANK 500Wt	Oper 64 RBEX
See remarks	(CEN)		
LATITUDE- 51 DEG 11 MIN N		LONGITUDE-	5 DEG 07 MIN E

TECHNOLOGY SOURCE-Design & bldr: OWNER/OPERATOR-Centre d'Etude de
 Centre d'Etudes de l'Enen. Nucl. l'Energie Nucleaire (CEN) and SCK
 SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Experimental study at 10W power of water moderated power
 reactors (See remarks)
 FUEL STORAGE CAPACITY-

PROCESS-Tank-type enriched (7%) uranium, heavy and light water
 moderated, cooled and reflected

SCHEDULE-In operation; start of construction: 1963; reactor critical:
 April 1964

REMARKS-VENUS=Vulcain Experimental Nuclear Study
 Purpose: Program related to the development of the Vulcain reactor:
 Neutron flux: Thermal max (10 E 9)n/(cm E 2)sec
 Critical mass: 1160 Kg UO-2 (7% enriched) for 100% H-20, 350 Kg UO-2
 (7% enriched) for 100% D-20

REFERENCES-

- 1-Directory of Nuclear Reactors, Vol VI, IAEA, 1966, p. 169
- 2-Intl Data Collection and Analysis, Vol I, NAC, June 1978

ACTIVITY--BELGIUM FUEL FABRICATION
 CATEGORY-FUEL FABRICATION PLANTS

NUCLEAR FACILITY PROFILE
 SRM 08 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
Plutonium Lab.	Mol	UPuO (small)		Oper	60	RBEZ

LATITUDE- 51 DEG 11 MIN N

LONGITUDE- 5 DEG 07 MIN E

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Belgonucleaire

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-U-Pu mixed oxide, U-carbide, Pu-carbide, U-oxide, Pu-oxide, and Th-carbide fuel/research and development
 FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-Lab scale operation since 1960. Pilot plant in operation since 1968 for production of U-Pu mixed-oxide fuels
 REMARKS-

REFERENCES-

1-NAC; Intl Data Collection and Analysis; Task 1, Vol I; 6/78

BE 10

ACTIVITY--BELGIUM RESEARCH AND TEST REACTOR NUCLEAR FACILITY PROFILE
CATEGORY--RESEARCH AND TEST REACTORS DMK 05 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
BR-3	Mol	PWR	10.5 MWe	Oper	72	RBGE

LATITUDE- 51 DEG 11 MIN N

LONGITUDE- 5 DEG 07 MIN E

TECHNOLOGY SOURCE-Constructor:
Belgonucleaire, UKAEA, CEN
SUPPLY SOURCE-

OWNER/OPERATOR-Owner: CEN/SCK

SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-In operation

REMARKS-

REFERENCES-

1-Intl Data Collection and Analysis, Vol I, NAC, June 1978

ACTIVITY--BELGIUM RESEARCH AND TEST REACTOR NUCLEAR FACILITY PROFILE
 CATEGORY--RESEARCH AND TEST REACTORS DMK 05 SEP 78

FACILITY NAME	LOCATION	FAC	TYPE	CAPACITY	STATUS	YR	CODE
BR-3/VN	Mol	TANK	40.9 MWT			65	RBEJ
BR-3/Vulcain Reac (CEN)							
LATITUDE-	DEG	MIN	LONGITUDE-	DEG	MIN		

TECHNOLOGY SOURCE--UKAEA with coop- OWNER/OPERATOR--Centre d'Etude de
 eration of CEN. See remarks l'Energie Nucleaire (CEN)
 SUPPLY SOURCE-- SAFEGUARDS--

PRODUCT/USE--Neutron physics and engineering tests of fuel and
 components

FUEL STORAGE CAPACITY--

PROCESS--Tank-type, enriched (7%) uranium, heavy and light water
 moderated, cooled and reflected

SCHEDULE--Critical: late 1965

REMARKS--Modifications of the BR-3 Reactor for Vulcain designed and
 built by Belgonucleaire S.A.
 Critical mass: 21.45 Kg U-235 (100% cold H-20), 71.5 Kg U-235 (100%
 cold D-20)
 Core loading at rated power: 70.2 Kg U-235, .91 Kg Pu-239 + Pu-24),
 946 Kg U-238
 Av. specific power in fuel: 583 KW/Kg U-235
 Av. power density in core: 69 KW/litre
 Fuel loading and unloading: Under borated H-20 flooding

REFERENCES--

1-Directory of Nuclear Reactors, Vol VI, IAEA, 1966, p. 191

ACTIVITY--BELGIUM WASTE MANAGEMENT
 CATEGORY--WASTE DISPOSAL FACILITIES

NUCLEAR FACILITY PROFILE
 SRM 21 AUG 78

FACILITY NAME LOCATION
 Eurobitum Mol

FAC FAC
 TYPE CAPACITY STATUS YR CODE
 PREP 650 m3 Oper 77 RBGF
 (m3/yr)

LATITUDE- 51 DEG 11 MIN N

LONGITUDE- 5 DEG 07 MIN E

TECHNOLOGY SOURCE-Eurochemic
 Group

OWNER/OPERATOR-Eurochemic Group

SUPPLY SOURCE-Eurochemic
 Reprocessing Plant

SAFEGUARDS-

PRODUCT/USE-Bitumen and waste mixture is cast into 220 l chromized
 steel drums/interim storage in concrete bunkers (Eurostorage)

FUEL STORAGE CAPACITY-

PROCESS-Bitumenization of non-high-level waste using screw extruder-
 evaporator process

SCHEDULE-Currently in operation

REMARKS-Capacity of 650 cubic meters per year corresponds to 3600
 waste drums produced per year

Eurochemic- reprocessing company organized by Austria, Belgium,
 Denmark, France, West Germany, Italy, Netherlands, Norway, Spain,
 Portugal, Sweden, Switzerland, and Turkey

REFERENCES-

- 1-Harmon, K.M.; Intl Source Book: A Compendium of Worldwide
 Programs in Nuclear Energy Supply and Radioactive Waste
 Management Research and Development; Vol I; 1/78

ACTIVITY--BELGIUM WASTE MANAGEMENT
 CATEGORY-WASTE DISPOSAL FACILITIES

NUCLEAR FACILITY PROFILE
 SRM 21 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
PAMELA II	Mol	PREP	40	1/hr Plan	81	RBG

LATITUDE- 51 DEG 11 MIN N

LONGITUDE- 5 DEG 07 MIN E

TECHNOLOGY SOURCE-Eurochemic,
 West Germany- Gelsenberg AG

OWNER/OPERATOR-Eurochemic Group

SUPPLY SOURCE-Eurochemic
 Reprocessing Plant

SAFEGUARDS-

PRODUCT/USE-Glass beads (vitrified high-level liquid waste) embedded
 in metal matrix/disposal

FUEL STORAGE CAPACITY-

PROCESS-LOTES (Low Temperature Solidification) process (similar
 process named PAMELA by Gelsenberg AG)

SCHEDULE-Pilot plant planned for operation in 1981

REMARKS-Expect to have the existing high-level liquid waste from the
 inactive Eurochemic Reprocessing Plant solidified and incorporated
 into 200-300 canisters by 1983

Eurochemic- reprocessing company organized by Austria, Belgium,
 Denmark, France, West Germany, Norway, Netherlands, Italy, Spain,
 Portugal, Sweden, Switzerland, and Turkey

REFERENCES-

- 1-Harmon, K.M.; Intl Source Book: A Compendium of Worldwide Programs
 in Nuclear Energy Supply and Radioactive Waste Management Research
 and Development; Vol I; 1/78

ACTIVITY--BELGIUM WASTE MANAGEMENT
 CATEGORY-WASTE DISPOSAL FACILITIES

NUCLEAR FACILITY PROFILE
 SRM 21 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
	Mol	DISP	10000 m3 (m3/yr)	Plan	79	RBGH

LATITUDE- 51 DEG 11 MIN N

LONGITUDE- 5 DEG 07 MIN E

TECHNOLOGY SOURCE-Belgium,
 SCK/CEN

OWNER/OPERATOR-SCK/CEN (Nuclear
 Energy Research Center)

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-10000 cubic meters at a depth of 200-250 meters

PROCESS-Disposal of intermediate-level and alpha-bearing wastes in
 clay deposits

SCHEDULE-Mining of cavity to be done in 1979

REMARKS-Will be used as a pilot plant for geologic dispos 1

REFERENCES-

- 1-Proceedings of Intl Symp on Management of Wastes from the LWR
 Fuel Cycle; Denver, Col; 7/11-16/76
- 2-Harmon, K.M.; Intl Source Book: A Compendium of Worldwide Programs
 in Nuclear Energy Supply and Radioactive Waste Management Research
 and Development; Vol I; 1/78

ACTIVITY--BELGIUM WASTE MANAGEMENT
 CATEGORY--WASTE DISPOSAL FACILITIES

NUCLEAR FACILITY PROFILE
 SRM 21 AUG 78

FACILITY NAME	LOCATION	FAC	FAC
	Mol	TYPE CAPACITY STATUS YR CODE	
		PREP 80 1/hr Oper	64 RBGJ

LATITUDE- 51 DEG 11 MIN N

LONGITUDE- 5 DEG 07 MIN E

TECHNOLOGY SOURCE-Belgium,
 SCK/CEN
 SUPPLY SOURCE-

OWNER/OPERATOR-SCK/CEN (Nuclear
 Energy Research Center)
 SAFEGUARDS-

PRODUCT/USE-Homogenized bitumen and waste mixture in dried sludge
 form/disposal
 FUEL STORAGE CAPACITY-

PROCESS-Stirred-evaporator batch process for solidification of non-
 high-level liquid wastes in bitumen
 SCHEDULE-Currently in operation since 1964

REMARKS-

REFERENCES-

- 1-Harmon, K.M.; Intl Source Book: A Compendium of Worldwide Programs
 in Nuclear Energy Supply and Radioactive Waste Management Research
 and Development; Vol I; 1/78

ACTIVITY--BELGIUM WASTE MANAGEMENT
 CATEGORY-WASTE DISPOSAL FACILITIES

NUCLEAR FACILITY PROFILE
 SRM 21 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
EUROSTORAGE	Mol	DISP		Oper		RBGK

LATITUDE- 51 DEG 11 MIN N

LONGITUDE- 5 DEG 07 MIN E

TECHNOLOGY SOURCE-Eurochemic
 Group

OWNER/OPERATOR-Eurochemic Group

SUPPLY SOURCE-Eurochemic
 Reprocessing Plant

SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-Wastes stored in 220 litre drums, 5000 drums
 per bunker

PROCESS-Interim surface storage of non-high-level solid and solidified
 wastes in concrete bunkers

SCHEDULE-Currently in operation- to be used for 50 years

REMARKS-Eurochemic- reprocessing company organized by Austria,
 Belgium, Denmark, France, West Germany, Sweden, Spain, Portugal,
 Norway, Netherlands, Italy, Switzerland, and Turkey

REFERENCES-

- 1-Harmon, K.M.; Intl Source Book: A Compendium of Worldwide Programs
 in Nuclear Energy Supply and Radioactive Waste Management Research
 and Development; Vol I, 1/78

ACTIVITY--BELGIUM WASTE MANAGEMENT
 CATEGORY--WASTE DISPOSAL FACILITIES

NUCLEAR FACILITY PROFILE
 SRM 21 AUG 78

FACILITY NAME	LOCATION	FAC	FAC
	Mol	TYPE CAPACITY STATUS YR CODE	
		PREP 150 Kg/h Oper 75 RBGL	
		(kg/hr)	
LATITUDE- 51 DEG 11 MIN N		LONGITUDE- 5 DEG 07 MIN E	

TECHNOLOGY SOURCE--Belgium,
 SCK/CEN
 SUPPLY SOURCE--

OWNER/OPERATOR--SCK/CEN (Nuclear
 Energy Research Center)
 SAFEGUARDS--

PRODUCT/USE--Basalt-like granular slag/disposal

FUEL STORAGE CAPACITY--

PROCESS--High-temperature incineration of solid waste

SCHEDULE--Currently in operation for non-radioactive testing

REMARKS--Future plans include studies of process parameters and
 operation using plutonium-contaminated wastes

REFERENCES--

- 1-Harmon, K.M.; Intl Source Book: A Compendium of Worldwide Programs
 in Nuclear Energy Supply and Radioactive Waste Management Research
 and Development; Vol I, 1/78

ACTIVITY--BELGIUM WASTE MANAGEMENT
 CATEGORY--WASTE DISPOSAL FACILITIES

NUCLEAR FACILITY PROFILE
 SRM 21 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
	Atlantic Ocean	DISP	2000 te	Oper		RBGM
			(te/yr)			
LATITUDE-	DEG	MIN	LONGITUDE-	DEG	MIN	

TECHNOLOGY SOURCE-

OWNER/OPERATOR-SCK/CEN (Nuclear
 Energy Research Center)

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-Ocean dumping of low-level waste

SCHEDULE-Currently in operation

REMARKS-Low-level waste is incorporated into asphalt or concrete
 matrix

REFERENCES-

- 1-Harmon, K.M.; Intl Source Book: A Compendium of Worldwide Programs
 in Nuclear Energy Supply and Radioactive Waste Management Research
 and Development; Vol I; 1/78

ACTIVITY--BELGIUM WASTE MANAGEMENT
 CATEGORY--WASTE DISPOSAL FACILITIES

NUCLEAR FACILITY PROFILE
 SRM 21 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
Eurowatt	Mol	PREP	1000 l/d (1/day)	Constr		RBGN

LATITUDE- 51 DEG 11 MIN N LONGITUDE- 5 DEG 07 MIN E

TECHNOLOGY SOURCE-Eurochemic
 Group

OWNER/OPERATOR-Eurochemic Group

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Phosphoric acid solution of fission products/disposal

FUEL STORAGE CAPACITY-

PROCESS-Treatment of spent Purex solvent

SCHEDULE-Pilot plant under construction

REMARKS-Purex (TBP) and fission products removed from solvent, Purex is pyrolyzed by heating leaving phosphoric acid solution of fission products.

Eurochemic- reprocessing company organized by Austria, Belgium, Denmark, France, West Germany, Sweden, Portugal, Netherlands, Norway, Italy, Switzerland, and Turkey.

REFERENCES-

1-Harmon, K.M.; Intl Source Book: A Compendium of Worldwide Programs in Nuclear Energy Supply and Radioactive Waste Management Research and Development; Vol I; 1/78

ACTIVITY--BELGIUM WASTE MANAGEMENT
 CATEGORY--WASTE DISPOSAL FACILITIES

NUCLEAR FACILITY PROFILE
 SRM 22 AUG 78

FACILITY NAME	LOCATION	FAC	FAC
	Mol	TYPE	CAPACITY STATUS YR CODE
		PREP	200 kg/h Inactv 60 RBGP
			(kg/hr)

LATITUDE- 51 DEG 11 MIN N

LONGITUDE- 5 DEG 07 MIN E

TECHNOLOGY SOURCE-Belgium,
 SCK/CEN

OWNER/OPERATOR-SCK/CEN (Nuclear
 Energy Research Center)

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-Incineration of low-level wastes; triple chamber, 900 degrees
 C, gas fired

SCHEDULE-Started operation in 1960; currently inactive

REMARKS-

REFERENCES-

- 1-ERDA; Alternatives for Managing Wastes from Reactors and Post-Fission Operations in the LWR Fuel Cycle; Vol II; 5/76

BE 21

ACTIVITY--BELGIUM WASTE MANAGEMENT
CATEGORY--WASTE DISPOSAL FACILITIES

NUCLEAR FACILITY PROFILE
SRM 22 AUG 78

FACILITY NAME LOCATION
Mol

FAC FAC
TYPE CAPACITY STATUS YR CODE
PREP 10 Kg/hr Oper 70 RBGR

LATITUDE- 51 DEG 11 MIN N

LONGITUDE- 5 DEG 07 MIN E

TECHNOLOGY SOURCE-Belgium,
SCK/CEN

OWNER/OPERATOR-SCK/CEN (Nuclear
Energy Research Center)

SUPPLY SOURCE-Eurochemic
Reprocessing Plant

SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-Incineration of low-level wastes; single chamber, 900 degrees
C, tilting grate, propane fired

SCHEDULE-Pilot plant currently in operation since 1970

REMARKS-

REFERENCES-

- 1-ERDA; Alternatives for Managing Wastes from Reactors and Post-Fission Operations in the LWR Fuel Cycle; Vol II; 5/76

BL 1

ACTIVITY--BOLIVIA RESOURCE RECOVERY
CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 21 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
	Cotaje	URAN		Plan	80	RBOC

LATITUDE- DEG MIN

LONGITUDE- DEG MIN

TECHNOLOGY SOURCE-

OWNER/OPERATOR-COBOEN- Comision
Boliviana de Energia Nuclear

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-Pilot operation being established before full scale
production

REMARKS-

REFERENCES-

1-Mining Magazine, March 1978, p. 243

BR 1

ACTIVITY--BRAZIL ENRICHMENT PLANTS
CATEGORY-ENRICHMENT PLANTS

NUCLEAR FACILITY PROFILE
SRM 21 JUL 78

FACILITY NAME LOCATION
Nuclei Sepetiba

FAC FAC
TYPE CAPACITY STATUS YR CODE
JET 180 KSWU Plan 82 RBRA

LATITUDE- 22 DEG 54 MIN S

LONGITUDE- 43 DEG 59 MIN W

TECHNOLOGY SOURCE-West Germany-
E.W. Becker, STEAG AG
SUPPLY SOURCE-

OWNER/OPERATOR-Nuclebras, STEAG AG,
Interatom GmbH/Nuclei
SAFEGUARDS-West German-Brazil-IAEA
trilateral Safeguards Agreement

PRODUCT/USE-U235 enriched uranium/Reactor fuel fabrication

FUEL STORAGE CAPACITY-

PROCESS-Becker Jet Nozzle

SCHEDULE-Planned operation as a demonstration plant in 1982

REMARKS-Becker Jet Nozzle process was developed by E. W. Becker of Karlsruhe Nuclear Center in the early 1960's. Process demonstrated at Karlsruhe by STEAG AG and sold to Brazilian company Empresas Nucleares Brasileira SA(Nuclebras). Demonstration plant will be built and operated by Nuclebras Enriquecimento Isotopico SA(Nuclei)

REFERENCES-

- 1-NAC; Intl Data Collection and Analysis; Task 1, Vol I; 6/78
- 2-Benedict, M; Enrichment: A Critical Status Report; American Nuclear Society Transactions; Vol XXV; 1977
- 3-General Acctg Office; Overview of Nuclear Export Policies of Major Foreign Supplier Nations; 10/21/77

ACTIVITY--BRAZIL SPENT FUEL PROCESSING
 CATEGORY-FUEL REPROCESSING FACILITIES

NUCLEAR FACILITY PROFILE
 SRM 26 JUL 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	FAC YR CODE
	Sepetiba	UO	5 kg/day	Plan	86 RBRB

LATITUDE- 22 DEG 54 MIN S

LONGITUDE- 43 DEG 59 MIN W

TECHNOLOGY SOURCE-Germany (West)

OWNER/OPERATOR-Empresas Nucleares
 Brasileira SA (Nuclebras)

SUPPLY SOURCE-

SAFEGUARDS-West German-Brazil-IAEA
 trilateral Safeguards Agreement

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-U-oxide low-enriched fuel reprocessing

SCHEDULE-Pilot plant with very small capacity to begin operation
 between 1986 and 1990

REMARKS-A commercial plant is under consideration for operation after
 1990

REFERENCES-

- 1-Chayes, Abram and W. Bennett Lewis; International Arrangements
 for Nuclear Fuel Reprocessing; 1977
- 2-NAC; Intl Data Collection and Analysis; Task 1, Vol I; 6/78

BR 3

ACTIVITY--BRAZIL RESEARCH AND TEST REACTOR NUCLEAR FACILITY PROFILE
CATEGORY--RESEARCH AND TEST REACTORS DMK 30 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR CODE
IEAR-1	Sao Paulo, Brazil	POOL	5 Mwt		58 RBRR

LATITUDE- 23 DEG 33 MIN S LONGITUDE- 46 DEG 39 MIN W

TECHNOLOGY SOURCE-Babcock & Wilcox OWNER/OPERATOR-Conselho Nacional De
Co., Conselho Nac. De Pes. Pesquisas/Inst De Energia Atomica
SUPPLY SOURCE- SAFEGUARDS-IAEA (Non-NPT)

PRODUCT/USE-Research

FUEL STORAGE CAPACITY-

PROCESS-Pool type, enriched (20%) uranium, light water moderated and cooled

SCHEDULE-Reactor Critical: Sept 1957;

Full power operation: Feb 1958

REMARKS-Reactor is very similar to the Ford Nuclear Reactor and the Research Reactor Geesthacht

REFERENCES-

- 1-Directory of Nuclear Reactors, Vol III, IAEA, 1960, p. 25
- 2-Intl. Atomic Energy Agency Bulletin, Vol XIX, No 5, Oct. 1977

ACTIVITY--BRAZIL FUEL FABRICATION
 CATEGORY--FUEL FABRICATION PLANTS

NUCLEAR FACILITY PROFILE
 SRM 08 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
Inst Energie Atomica (IEA)	Sao Paulo	U308	10 te/yr	Oper		RBRS

LATITUDE- 23 DEG 33 MIN S

LONGITUDE- 46 DEG 39 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-State of Sao Paulo/
 University of Sao Paulo

SUPPLY SOURCE-

SAFEGUARDS-IAEA Safeguards
 Agreement

PRODUCT/USE-U308 pellets sheathed in aluminum/critical assemblies

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-Currently in operation

REMARKS-Can also make alloy fuel for 5 MW reactor at IEA and can
 produce UF4 from domestically supplied U308

REFERENCES-

- 1-NAC; Intl Data Collection and Analysis; Task 1, Vol I; 6/78
- 2-IAEA Bulletin; Vol XIX, No 5; 10/77

BR 5

ACTIVITY--BRAZIL RESOURCE RECOVERY
CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 01 AUG 78

FACILITY NAME

LOCATION
Campos Belos
Goias

FAC	FAC			
TYPE	CAPACITY	STATUS	YR	CODE
URAN		Explor		RBRT

LATITUDE- 13 DEG 09 MIN S

LONGITUDE- 47 DEG 03 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-CNEN

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-CNEN-Comissao Nacional de Energia Nuclear

REFERENCES-

- 1-Uranium Resources, Production and Demand, IAEA, Dec. 1977, p. 54
- 2-Nucleonics Week, 21 April 1977, p. 11

ACTIVITY--BRAZIL RESEARCH AND TEST REACTOR NUCLEAR FACILITY PROFILE
 CATEGORY--RESEARCH AND TEST REACTORS DMK 30 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
RIEN-1	Rio de Janeiro	ARGO	.01 Mwt	Oper	65	RBRW
Argonauta Reactor See remarks						
LATITUDE- 22 DEG 53 MIN S			LONGITUDE- 43 DEG 17 MIN W			

TECHNOLOGY SOURCE--Designed by ANL OWNER/OPERATOR--Comissao Nacional de
 built by Mecanica CBV Ltda Energia Nuclear; Ref. 3: IEN
 SUPPLY SOURCE- SAFEGUARDS-IAEA (non-NPT)

PRODUCT/USE--Reactor and neutron physics, engineering tests, laboratory
 scale isotope production, educational purposes

FUEL STORAGE CAPACITY--Irradiated fuel storage: 24 pits, coffin
 handling

PROCESS--Argonaut-type, enriched (19.91%) uranium, light water cooled
 and moderated, light water and graphite reflected

SCHEDULE--In operation; reactor critical: Feb. 1965

REMARKS--The reactor is located at the Instituto de Engenharia Nuclear,
 Cidade University, Rio de Janeiro, Guanabara

Power density: Normal 14 W/litre (one-slab core, 100 W); Design max
 .7 KW/litre (one-slab core, 5 KW)

Neutron flux: At 10 KW, 2 slabs- Thermal av $.57 \times (10 \text{ E } 11)\text{n}/$
 $(\text{cm E } 2)\text{sec}$ in the fuel; Thermal max $1.2 \times (10 \text{ E } 11)\text{n}/(\text{cm E } 2)\text{sec}$ in
 central reflector; Fast max $.65 \times (10 \text{ E } 11)\text{n}/(\text{cm E } 2)\text{sec}$

Critical mass: 2.055 Kg U-235 (one-slab loading)

Core loading: 2.075 Kg U-235

Specific power: Normal-50 W/Kg U-235 (one-slab core, 100 W); Design
 max 2.2 KW/Kg U-235 (two-slab core, 10 KW)

REFERENCES-

- 1-Directory of Nuclear Reactors, Vol VIII, IAEA, 1970, p. 99
- 2-Intl Atomic Energy Agency Bulletin, Vol XIX, No 5, Oct. 1977
- 3-Intl Data Collection and Analysis, Vol I, NAC, June 1978

BR 7

ACTIVITY--BRAZIL RESEARCH AND TEST REACTOR NUCLEAR FACILITY PROFILE
CATEGORY--RESEARCH AND TEST REACTORS DMK 30 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
Triga-Brazil	Belo Horizonte	SHRR	30 Kwt	Oper	59	RBRY

LATITUDE- 19 DEG 54 MIN S LONGITUDE- 43 DEG 54 MIN W

TECHNOLOGY SOURCE-Design & Bldr: OWNER/OPERATOR-Escola De Engenharia
Gen Atomic Div of Gen Dynamics Da Universidad De Minas Gerais
SUPPLY SOURCE- SAFEGUARDS-IAEA (Non-NPT)

PRODUCT/USE-Neutron & solid state phy., engineering tests, medicine,
chem., isotope prod, educational purposes
FUEL STORAGE CAPACITY-

PROCESS-Solid homogeneous, highly enriched (20%) uranium, zirconium
hydride&light water moderated,light water cooled,graphite reflected
SCHEDULE-Reactor critical: 1959

REMARKS-Reactor is identical to the Triga Rsch Reactor, John Hopkins
Lab., San Diego, Cal. (Prototype)

REFERENCES-

- 1-Directory of Nuclear Reactors, Vol II, IAEA, 1959, p. 233
- 2-Intl. Atomic Energy Agency Bulletin, Vol XIX, No 5, Oct. 1977

ACTIVITY--BRAZIL ENRICHMENT PLANTS
 CATEGORY-ENRICHMENT PLANTS

NUCLEAR FACILITY PROFILE
 SRM 21 JUL 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR CODE
	Sepetiba	JET	5000 K (KSWU)	Plan	RBZA

LATITUDE- 22 DEG 54 MIN S LONGITUDE- 43 DEG 59 MIN W

TECHNOLOGY SOURCE-NUSTEP-KG OWNER/OPERATOR-Nuclebras/Nuclei

SUPPLY SOURCE- SAFEGUARDS-IAEA Safeguards will be
 in force

PRODUCT/USE-U235 enriched uranium/Reactor fuel fabrication

FUEL STORAGE CAPACITY-

PROCESS-Becker Jet Nozzle

SCHEDULE-Planned for operation in late 1980's

REMARKS-Nuclebras-Empresas Nucleares Brasileira SA; Nuclei-Nuclebras
 Enriquecimento Isotopico SA. NUSTEP-KG is a joint venture of
 Nuclebras and a German firm, TEP mbH, located in Essen, Germany.
 Capacity will be 1000-5000 KSWU/yr depending on requirements of
 Brazilian Reactors

REFERENCES-

- 1-NAC; Intl Data Collection and Analysis; Task 1, Vol I; 6/78
- 2-IAEA Bulletin; Vol XIX, No 5; 10/77

ACTIVITY--BRAZIL RESOURCE RECOVERY
 CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 01 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
	Figueira Parana	URAN		Explor		RBZD

LATITUDE- DEG MIN LONGITUDE- DEG MIN

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Comissao Nacional de Energia Nuclear (CNEN)

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-2000 te in 0.15% grade ore
 4000 te in 0.04% grade ore

REFERENCES-

1-Minerals Yearbook, 1974, Vol III, p. 190

2-Uranium Resources, Production and Demand, IAEA, Dec 1977, p. 54

ACTIVITY--BRAZIL FUEL FABRICATION
 CATEGORY-FUEL FABRICATION PLANTS

NUCLEAR FACILITY PROFILE
 SRM 08 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
	Sepetiba	UO	50 te/yr	Constr	78	RBZE

LATITUDE- 22 DEG 54 MIN S

LONGITUDE- 43 DEG 59 MIN W

TECHNOLOGY SOURCE-West Germany-
 KWU, RBU

OWNER/OPERATOR-Nuclebras (70%), KWU
 (Kraftwerk Union AG) (30%)

SUPPLY SOURCE-

SAFEGUARDS-Brazil-West Germany-IAEA
 trilateral Safeguards Agreement

PRODUCT/USE-U-oxide fuel assemblies/Brazilian power reactors

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-Pilot fabrication plant to begin operation in 1978

REMARKS-Capacity is sufficient to provide annual reload requirements
 for Angra dos Reis-1. Can be expanded up to 100 te/yr as domestic
 demand requires

REFERENCES-

- 1-NAC; Intl Data Collection and Analysis; Task 1, Vol I; 6/78
- 2-General Acctg Office; Overview of Nuclear Export Policies of
 Major Foreign Supplier Nations; 10/21/77

BR 11

ACTIVITY--BRAZIL RESOURCE RECOVERY
CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 01 AUG 78

FACILITY NAME	LOCATION	FAC	TYPE	CAPACITY	STATUS	YR	CODE
	Pocos de Caldas		URAN	500 te/y	Constr	79	RBZG
	Minas Gerais						

LATITUDE- 21 DEG 48 MIN S

LONGITUDE- 46 DEG 33 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Nuclebras Auxiliar
de Mineracao (NUCLAM)

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-Preliminary work extracted 3 te in 1974

REMARKS-Reserves-11200 te (measured and indicated)
2730 te (inferred)

REFERENCES-

- 1-Mining Magazine, Sept. 1977, p. 249
- 2-Minerals Yearbook, 1974, Vol III, pp. 175-193
- 3-Uranium Resources, Production and Demand, IAEA, Dec 1977,
pp. 54-55

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ACTIVITY--BRAZIL RESOURCE RECOVERY
CATEGORY--MILLS

NUCLEAR FACILITY PROFILE
PSM 01 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
	Pocos de Caldas	URAN	500 te/y	Constr	79	RBZH

LATITUDE- 21 DEG 48 MIN S

LONGITUDE- 46 DEG 33 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Empresas Nucleares
Brasileiras S. A. (Nuclebras)

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

1-Uranium Resources, Production and Demand, IAEA, Dec 1977,
pp. 54-55

BR 13

ACTIVITY--BRAZIL RESOURCE RECOVERY
CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 01 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
	Olinda Pernambuco	URAN		Explor		RB2J

LATITUDE- 08 DEG 00 MIN S

LONGITUDE- 34 DEG 51 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-CNEN

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-CNEN- Comissao Nacional de Energia Nuclear

REFERENCES-

1-Minerals Yearbook, 1974, Vol III, p. 190

BR 14

ACTIVITY--BRAZIL RESOURCE RECOVERY
CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 01 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
	Araxa	URAN		Explor		RBZK
	Minas Gerias					

LATITUDE- 19 DEG 37 MIN S

LONGITUDE- 46 DEG 50 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-CNEN

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-CNEN- Comissao Nacional de Energia Nuclear

REFERENCES-

1-Minerals Yearbook, 1974, Vol III, p. 190

BR 15

ACTIVITY--BRAZIL RESOURCE RECOVERY
CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 01 AUG 78

FACILITY NAME LOCATION
 Amorinopolis
 Goias

FAC FAC
TYPE CAPACITY STATUS YR CODE
URAN Explor RBZL

LATITUDE- DEG MIN LONGITUDE- DEG MIN

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Empresas Nucleares
 Brasileiras S.A. (Nuclebras)

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-Resources: 3000 te

REFERENCES-

- 1-Uranium Resources, Production and Demand, IAEA, December 1977,
p. 54
- 2-Nucleonics Week, 21 April 1977, p. 11

ACTIVITY--BRAZIL RESOURCE RECOVERY
 CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 01 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
	Quadilatero Ferrifero	URAN		Explor		RBZM

LATITUDE- DEG MIN LONGITUDE- DEG MIN

TECHNOLOGY SOURCE-

OWNER/OPERATOR-CNEN

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-Resources: 4800 te

CNEN- Comissao Nacional de Energia Nuclear

REFERENCES-

- 1-Uranium Resources, Production and Demand, IAEA, Dec. 77, p. 54
- 2-Nucleonics Week, 21 April 1977, p. 11

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ACTIVITY--BRAZIL RESOURCE RECOVERY
CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 22 SEP 78

FACILITY NAME

LOCATION

FAC

FAC

TYPE CAPACITY STATUS YR CODE

Itabapoana

THOR

Oper

RBZN

Rio de Janeiro

LATITUDE- 21 DEG 17 MIN S

LONGITUDE- 40 DEG 59 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-CNEN

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Thorium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-CNEN- Comissao Nacional de Energia Nuclear

REFERENCES-

1-Minerals Yearbook, US Bureau of Mines, 1973, Vol I, p. 1208

BR 18

ACTIVITY--BRAZIL RESOURCE RECOVERY
CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 25 SEP 78

FACILITY NAME

LOCATION

FAC

TYPE CAPACITY STATUS YR CODE

Cumuruxatiba

THOR

Oper

RBZP

LATITUDE- 17 DEG 06 MIN S

LONGITUDE- 39 DEG 13 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-CNEN

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Thorium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-CNEN- Commissao Nacional de Energia Nuclear

REFERENCES-

1-Minerals Yearbook, US Bureau of Mines, 1973, Vol I, p. 1208

BU 1

ACTIVITY--BULGARIA RESEARCH AND TEST REACTOR NUCLEAR FACILITY PROFILE
CATEGORY--RESEARCH AND TEST REACTORS DMK 30 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
IRT-Sofia	Sofia	POOL		Oper	61	RBLE

LATITUDE- 42 DEG 40 MIN N LONGITUDE- 23 DEG 18 MIN E

TECHNOLOGY SOURCE- OWNER/OPERATOR-See remarks

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Research in nuclear physics, radiation chemistry and
biology, isotope production
FUEL STORAGE CAPACITY-

PROCESS-Pool-type, enriched (10%) uranium, light water moderated,
cooled and reflected

SCHEDULE-Start of construction: 1959; reactor critical: Aug. 1961;
full power operation: Sept. 1961

REMARKS-This reactor is similar in its main parts to the Soviet
research reactor IRT at Moscow, USSR
Owner/Operator: Institute of Physics, Academy of Science of People's
Republic of Bulgaria

REFERENCES-

1-Directory of Nuclear Reactors, Vol V, IAEA, 1964, p. 31

BU 2

ACTIVITY--BULGARIA RESOURCE RECOVERY
CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 20 SEP 78

FACILITY NAME LOCATION
Buhovo Sofia

FAC FAC
TYPE CAPACITY STATUS YR CODE
Oper RBL

LATITUDE- 42 DEG 40 MIN N

LONGITUDE- 23 DEG 18 MIN E

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Government operated

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-Alternate spellings: Bukhova
Sofiya

REFERENCES-

1-Minerals Yearbook, US Bureau of Mines, 1950, p. 1270

CA 1

ACTIVITY--CANADA SPENT FUEL PROCESSING
CATEGORY--FUEL REPROCESSING FACILITIES

NUCLEAR FACILITY PROFILE
SRM 28 JUL 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
Chalk River Nucl Lab	Chalk River	UO	(small)	Inactv		RDAD

LATITUDE- 46 DEG 01 MIN N

LONGITUDE- 77 DEG 28 MIN W

TECHNOLOGY SOURCE-Atomic Energy
of Canada Ltd (AECL)

OWNER/OPERATOR-AECL

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-Natural U-oxide (Candu) fuel reprocessing

SCHEDULE-Small lab scale operation now closed down

REMARKS-Canadian government has ordered a halt to all reprocessing
activities pending the results of the INFCE program

REFERENCES-

1-Nuclear Proliferation Factbook; Congressional Research
Services, Library of Congress; 9/23/77

ACTIVITY--CANADA FUEL FABRICATION
CATEGORY--FUEL FABRICATION PLANTS

NUCLEAR FACILITY PROFILE
SRM 14 AUG 78

FACILITY NAME LOCATION
Canadian Gen Electr. Peterborough
Fuel Fab. Plant

FAC	FAC
TYPE	YR CODE
UO	Oper RDAT

LATITUDE- 44 DEG 19 MIN N

LONGITUDE- 78 DEG 20 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Canadian General
Electric (CGE)

SUPPLY SOURCE-

SAFEGUARDS-NPT Safeguards
Agreement

PRODUCT/USE-U-oxide fuel/Candu-type reactors

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-Currently in operation

REMARKS--PRODUCTION HISTORY- Has supplied initial core loadings for
NPD, Douglas Point, Kanupp, and Pickering reactors. Has also
supplied reload fuel to most of these.

REFERENCES-

- 1-IAEA; The Annual Report for 1976; 7/77
- 2-NAC; Intl Data Collection and Analysis; Task 1, Vol II; 6/78
- 3-Nucl Eng Intl; Vol XXI, No 250; 11/76

CA 3

ACTIVITY--CANADA FUEL FABRICATION
CATEGORY--FUEL FABRICATION PLANTS

NUCLEAR FACILITY PROFILE
SRM 14 AUG 78

FACILITY NAME LOCATION
Canadian Gen Electr. Toronto
Pelletizing Plant

FAC	FAC			
TYPE	CAPACITY	STATUS	YR	CODE
UO		Oper		RDAU

LATITUDE- 43 DEG 42 MIN N

LONGITUDE- 79 DEG 25 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Canadian General
Electric (CGE)

SUPPLY SOURCE-

SAFEGUARDS-NPT Safeguards
Agreement

PRODUCT/USE-UO2 pellets/fuel rod loading and assembly

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-Currently in operation

REMARKS-

REFERENCES-

1-IAEA; The Annual Report for 1976; 7/77

ACTIVITY--CANADA RESOURCE RECOVERY
 CATEGORY--CONVERSION PLANTS

NUCLEAR FACILITY PROFILE
 SRM 01 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	FAC YR CODE
Eldorado Nuclear Conversion Fac.	Fort Hope	UF6	4000 te (te/yr)	Oper	70 RDAY
LATITUDE- 43 DEG 58 MIN N		LONGITUDE- 78 DEG 18 MIN W			

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Eldorado Nuclear Limited

SUPPLY SOURCE-All Canadian uranium exports

SAFEGUARDS-NPT Safeguards Agreement

PRODUCT/USE-UF6/feed for enrichment process. Other products are natural and enriched UO₂, zirconium, and uranium metal billets

FUEL STORAGE CAPACITY-

PROCESS-UF6 conversion uses wet solvent extraction process- U3O₈ to UO₃ to UO₂ to UF₄ to UF₆SCHEDULE-Original refinery in operation since 1933 but UF₆ production did not start until 1970REMARKS-PRODUCTION HISTORY- Eldorado has provided conversion services to customers in Europe, Japan, and U.S. The existing production capacity at Port Hope is fully committed into the 1990's with deliveries of 37000 te UF₆ under contract to those markets

NEW FACILITY PLANS- Eldorado plans to build another plant at Port Granby with capacity 10000 te/yr by 1981. A third refinery is under consideration for late 1980's

REFERENCES-

1-IAEA; The Annual Report for 1976; 7/77

2-NAC; Intl Data Collection and Analysis; Task 1, Vol II; 6/78

ACTIVITY--CANADA RESEARCH AND TEST REACTOR NUCLEAR FACILITY PROFILE
 CATEGORY-RESEARCH AND TEST REACTORS DMK 30 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
McMaster Nuclear Reactor	Hamilton, Ontario, Canada	POOL 2	MWt	Oper	59	RDBF

LATITUDE- 43 DEG 15 MIN N LONGITUDE- 79 DEG 50 MIN W

TECHNOLOGY SOURCE-Design & Bldr: AMD Atomics Can. Ltd; (See remarks) OWNER/OPERATOR-McMaster University
 SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Educational, neutron & solid state physics, isotope production
 FUEL STORAGE CAPACITY-

PROCESS-Pool type, highly enriched (>90%) uranium, light water moderated and cooled

SCHEDULE-Reactor critical: Feb 1959
 Full power (1 MW): May 1959

REMARKS-Design & bldr: Pigott Construction Co., Ltd. Canadian Comstock Co., Ltd. Nominal reac. power: 5 MWt; initial cooling capacity-1MW. The reactor is very similar to other AMF 5 MW open pool reactors, such as IRL, UCNCR

REFERENCES-

- 1-Directory of Nuclear Reactors, Vol III, IAEA, 1960, p. 67
- 2-Intl Data Collection and Analysis, Vol II, NAC, June 1978

ACTIVITY--CANADA RESEARCH AND TEST REACTOR NUCLEAR FACILITY PROFILE
 CATEGORY-RESEARCH & TEST REACTORS DMK 30 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR CODE
NRU Reactor	Chalk River, Ontario	TK-H	110 Mwt	Oper	58 RDBJ

LATITUDE- 46 DEG 01 MIN N LONGITUDE- 77 DEG 28 MIN W

TECHNOLOGY SOURCE-Design & Bldr: OWNER/OPERATOR-Atomic Energy of
 Atom En of Can & D.C. Howe Co Ltd Canada Ltd.
 SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Research, fuel elements and materials testing, Pu and
 isotope production
 FUEL STORAGE CAPACITY-Irradiated fuel storage: 2808 fuel ends, 180
 full rods, vertical under water
 PROCESS-Tank type, natural uranium, D-20 moderated, cooled and
 reflected
 SCHEDULE-Reactor critical: Nov 1957
 Full power operation: April 1958
 REMARKS-Fuel loading and unloading: From top at full power by machine

REFERENCES-

- 1-Directory of Nuclear Reactors, Vol II, IAEA, 1959, p. 301
- 2-Intl. Data Collection and Analysis, Vol II, NAC, June 1978

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ACTIVITY--CANADA RESEARCH & TEST REACTOR NUCLEAR FACILITY PROFILE
CATEGORY--RESEARCH AND TEST REACTORS DMK 30 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	FAC YR CODE
NRX	Chalk River, Ontario	TK-H	33 Mwt	Oper	47 RDBK

LATITUDE- 41 DEG 01 MIN N LONGITUDE- 77 DEG 28 MIN W

TECHNOLOGY SOURCE-Constructor: OWNER/OPERATOR-Owner: AECL

AECL

SUPPLY SOURCE-AECL

SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-In operation

REMARKS-

REFERENCES-

1-Intl Data Collection and Analysis, Vol II, NAC, June 1978

ACTIVITY--CANADA RESEARCH AND TEST REACTOR NUCLEAR FACILITY PROFILE
 CATEGORY--RESEARCH AND TEST REACTORS DMK 30 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
NRX Reactor	Chalk River, Ontario	TK-H	40 Mwt	Oper	48	RDBL

LATITUDE- 46 DEG 01 MIN N LONGITUDE- 77 DEG 28 MIN W

TECHNOLOGY SOURCE-Defense Ind. OWNER/OPERATOR-Atomic Energy of
 Ltd. (See remarks) Canada, Ltd.
 SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Neutron physics, isotope production, testing fuel
 elements and materials

FUEL STORAGE CAPACITY-Irradiated fuel storage: horizontally under
 water, vertically in the future

PROCESS-Tank type, nat. uranium, heavy water moderated, light water
 cooled, graphite reflected

SCHEDULE-Reactor critical: July 1947;

Full power: May 1948

REMARKS-Designer & builder: DIL in consultation with Canadian U.K.,
 and U.S. scientists. Fraser Brace Co. Ltd. Reference #2:
 Constructor: AECL.

Fuel rods loaded and unloaded from top by a mobile, lead shielded,
 vertical flask. Rubber hoses used to carry cooling water through
 rod during unloading. Rods cannot be removed while reactor is
 operating

REFERENCES-

- 1-Directory of Nuclear Reactors, Vol II, IAEA, 1959, p. 251
- 2-Intl. Data Collection and Analysis, Vol II, NAC, June 1978

ACTIVITY--CANADA RESEARCH AND TEST REACTOR NUCLEAR FACILITY PROFILE
 CATEGORY-RESEARCH AND TEST REACTORS DMK 30 SEP 78

FACILITY NAME	LOCATION	FAC	FAC
Pool Test Reactor	Chalk River, Ontario	POOL 10 Wt	Oper 57 RDBZ

LATITUDE- 46 DEG 01 MIN N LONGITUDE- 77 DEG 28 MIN W

TECHNOLOGY SOURCE-Bldr: Giffels & Valley (designer) (see remarks) OWNER/OPERATOR-Atomic Energy of Canada Ltd.
 SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Swing experiments for reactivity measurements

FUEL STORAGE CAPACITY-Irradiated fuel stored in a pool under water on storage racks

PROCESS-Pool type, highly enriched (>90%) uranium, light water moderated and cooled

SCHEDULE-Construction started: May 1956
 Reactor critical: Nov 1957

REMARKS-Nominal reactor power: 10w (normal), 10 Kw (possible)
 Contractor: M. J. Sulpher & Sons Ltd. Reactor & pile oscillator-
 Canadair Ltd.
 Fuel loading and unloading done manually with long-handled tool

REFERENCES-

1-Directory of Nuclear Reactors, Vol II, IAEA, 1959, p. 35

ACTIVITY--CANADA RESEARCH AND TEST REACTOR NUCLEAR FACILITY PROFILE
 CATEGORY-RESEARCH AND TEST REACTORS DMK 30 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	FAC YR CODE
Slowpoke-2	Ottawa, Ontario	POOL	.021 Mwt	Oper	71 RDCA

LATITUDE- 39 DEG 30 MINN

LONGITUDE- 80 DEG 12 MIN W

TECHNOLOGY SOURCE-Constructor:

OWNER/OPERATOR-Owner: AECL

AECL

SUPPLY SOURCE-AECL

SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-In operation

REMARKS-

REFERENCES-

1-Intl Data Collection and Analysis, Vol II, NAC, June 1978

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ACTIVITY--CANADA RESEARCH AND TEST REACTOR NUCLEAR FACILITY PROFILE
CATEGORY-RESEARCH AND TEST REACTORS DMK 30 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
Slowpoke-1	Toronto, Ontario	POOL	.021 Mwt	Oper	70	RDCB

LATITUDE- 43 DEG 42 MIN M LONGITUDE- 79 DEG 25 MIN W

TECHNOLOGY SOURCE-Constructor: OWNER/OPERATOR-Owner: Toronto Univ.
AECL

SUPPLY SOURCE-AECL SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-In operation

REMARKS-

REFERENCES-

1-Intl Data Collection and Analysis, Vol II, NAC, June 1978

ACTIVITY--CANADA FUEL FABRICATION
 CATEGORY-FUEL FABRICATION PLANTS

NUCLEAR FACILITY PROFILE
 SRM 14 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
Westinghouse Fuel Fabrication	Port Hope	UO		Oper		RDCD

LATITUDE- 43 DEG 58 MIN N

LONGITUDE- 78 DEG 18 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Westinghouse
 Canada

SUPPLY SOURCE-

SAFEGUARDS-NPT Safeguards
 Agreement

PRODUCT/USE-U-oxide fuel/Candu-type reactors

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-Currently in operation

REMARKS-PRODUCTION HISTORY- Has supplied fuel for initial core loadings for Gentilly-1 and Rajasthan-1 and -2. Reload fuel has been supplied to Douglas Point, Pickering, and NPD reactors

REFERENCES-

- 1-IAEA; The Annual Report for 1976; 7/77
- 2-NAC; Intl Data Collection and Analysis; Task 1, Vol II; 6/78
- 3-Nucl Eng Intl; Vol XXI, No 250; 11/76

ACTIVITY--CANADA RESEARCH AND TEST REACTOR NUCLEAR FACILITY PROFILE
 CATEGORY--RESEARCH AND TEST REACTORS DMK 30 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
WR-1	Pinawa, Manitoba	TK-H	40 Mwt	Oper	65	RDCE

Whiteshell Reactor

LATITUDE-	DEG	MIN	LONGITUDE-	DEG	MIN

TECHNOLOGY SOURCE-See remarks

OWNER/OPERATOR-Atomic Energy of
Canada Ltd.

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Test of coolant materials, coolant-tube materials and design, fuel materials & design, fuel cladding materials

FUEL STORAGE CAPACITY-Irrad. fuel: Long time- Organic filled cans for 3 x 37 elements; short time: 26 tubes with organic coolant

PROCESS-Tank-type, slightly enriched (2.4%) uranium, heavy water moderated & reflected, organic cooled, pressure tubes

SCHEDULE-In operation; start of construction: 1963;
reactor critical: Nov. 1965

REMARKS-Nominal reactor power: 40 Mwt convertible to 60 Mwt. Reference 2 claims owner is WNRE and constructor is AECL.
Design & bldg.: Canadian General Electric Co. Ltd., Shawinigan Engineering Co.

Neutron flux: Thermal av $5.59 \times (10 \text{ E } 13) \text{ n}/(\text{cm E } 2) \text{ sec}$; Thermal max $9.33 \times (10 \text{ E } 13) \text{ n}/(\text{cm E } 2) \text{ sec}$

Critical mass: 2.28 Kg U-235

Av power density in core: 119 KW/litre

Fuel loading and unloading: Organic cooled transfer flask transported by main crane

REFERENCES-

- 1-Directory of Nuclear Reactors, Vol VI, IAEA, 1966, p. 171
- 2-Intl Data Collection and Analysis, Vol II, NAC, June 1978

ACTIVITY--CANADA RESOURCE RECOVERY
 CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 15 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
Cluff Lake	Cluff Lake Saskatchewan	URAN	1500te/y	Constr	79	RDCG

LATITUDE- 58 DEG 20 MIN N

LONGITUDE-109 DEG 40 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-AMOK Ltd.

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-Open pit mining

SCHEDULE-Development recently suspended awaiting government approval.

Possible expansion to 2000 te/y in 1980's

REMARKS-\$C130 million for development of mine/mill

Estimated resources: 20000 te

Amok is a consortium comprised of COGEMA, Pechiney-Mokta, and CFMV
 all French firms each controlling equal shares.

One vein of ore assays at 8% thus requiring personnel gamma
 shielding

REFERENCES-

1-Mining Magazine, March 1978, p. 240

2-Mining Journal, Vol CCXC, #7453, 23 June 1978, p. 269

3-International Data Collection and Analysis, NAC, Vol 2, Task I,
 Canada, p. 21

4-Minerals Yearbook, 1974, Vol III, p. 235

5-Uranium Resources, Production and Demand, IAEA, Dec 1977,
 pp. 55-62

6-New York Times, 31 July 1978, p. 3 (Business)

ACTIVITY--CANADA RESEARCH AND TEST REACTOR NUCLEAR FACILITY PROFILE
 CATEGORY--RESEARCH AND TEST REACTORS DMK 30 SEP 78

		FAC		FAC
FACILITY NAME	LOCATION	TYPE	CAPACITY	STATUS YR CODE
ZEP-2	Chalk River, Ontario	TK-H	200 Wt	Oper 60 RDCH

LATITUDE- 46 DEG 01 MIN N

LONGITUDE- 77 DEG 28 MIN W

TECHNOLOGY SOURCE-Design: AECL

OWNER/OPERATOR-Atomic Energy of

Bldr.: Foster-Wheeler Ltd.

Canada Ltd. (AECL)

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Lattice testing

FUEL STORAGE CAPACITY-

PROCESS-Tank-type, natural uranium, heavy water moderated, graphite reflected, various coolants, eg HW, air, organic liquids, etc.

SCHEDULE-In operation; reactor critical: Sept 1960

REMARKS-Neutron flux: Thermal av $5 \times (10 \text{ E } 8) \text{ n}/(\text{cm E } 2) \text{ sec}$; Thermal

max $(10 \text{ E } 9) \text{ n}/(\text{cm E } 2) \text{ sec}$; Fast av $2 \times (10 \text{ E } 8) \text{ n}/(\text{cm E } 2) \text{ sec}$;

Fast max $5 \times (10 \text{ E } 8) \text{ n}/(\text{cm E } 2) \text{ sec}$

REFERENCES-

1-Directory of Nuclear Reactors, Vol V, IAEA, 1964, p. 223

ACTIVITY--CANADA RESEARCH AND TEST REACTOR NUCLEAR FACILITY PROFILE
 CATEGORY-RESEARCH AND TEST REACTORS DMK 30 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR CODE
ZEEP Zero Energy Exp Pile	Chalk River, Ontario	TK-H	Remarks	Remark	45 RDCJ
LATITUDE- 46 DEG 01 MIN N		LONGITUDE- 77 DEG 28 MIN W			

TECHNOLOGY SOURCE-Atomic Energy of Canada Ltd. OWNER/OPERATOR-Atomic Energy of Canada Ltd.
 SUPPLY SOURCE-AECL SAFEGUARDS-

PRODUCT/USE-Lattice experiments

FUEL STORAGE CAPACITY-

PROCESS-Tank-type, natural uranium, Pu, U-235, heavy water moderated, graphite reflected

SCHEDULE-In operation; reactor critical: Sept. 1945

REMARKS-First critical assembly outside U.S., originally designed for experiments for NRX reactor. CAPACITY: 3.5W for 8 hours a day; 30W for short intervals. Reference 2 claims ZEEP is shutdown
 Neutron flux: Thermal max. = $10 \text{ E } 8 \text{ n}/(\text{cm E } 2)\text{sec}$

REFERENCES-

- 1-Directory of Nuclear Reactors, Vol III, IAEA, 1960, p. 253
- 2-Intl Data Collection and Analysis, Vol II, NAC, June 1978

ACTIVITY--CANADA RESOURCE RECOVERY
 CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 17 AUG 78

FACILITY NAME	LOCATION	FAC	FAC
Birch Island	Clearwater	TYPE CAPACITY STATUS YR	CODE
	British Columbia	URAN 110 te/y Constr 80	RDCK

LATITUDE- 51 DEG 38 MIN N LONGITUDE-120 DEG 02 MIN W

TECHNOLOGY SOURCE- OWNER/OPERATOR-Consolidated Rexspar
 Minerals & Chemicals Limited

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-Open pit mining

SCHEDULE-8 to 10 year life expected

REMARKS-Average ore grade: 0.075%
 Environmental opposition may delay schedule

REFERENCES-

- 1-Foreign Uranium Supply, EPRI EA-725, p. 3-109
- 2-Mining Magazine, March 1978, p. 240

ACTIVITY--CANADA RESOURCE RECOVERY
 CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 17 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
Beaverlodge	Beaverlodge Saskatchewan	URAN	460 te/y	Oper	53	RDCL

LATITUDE- 59 DEG MIN N LONGITUDE-107 DEG MIN W

TECHNOLOGY SOURCE- OWNER/OPERATOR-Eldorado Nuclear Ltd

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-Underground mining

SCHEDULE-Expansion to 575 te in 1978 and 770 te in 1980

REMARKS-Beaverlodge receives its feed from two small ore bodies, Fay and Verna
 Production summary 1953-1959: 3835.3 te; 1960-1969: 7452.6 te;
 1970-1975: 2925.8 te
 Nine other mines began and ceased production in the period
 1954-1960.

REFERENCES-

- 1-Foreign Uranium Supply, EPRI EA-725, p. 3-11
- 2-International Data Collection and Analysis, NAC, Task 1, Vol II, Canada, p. 28 to 32
- 3-Mining Magazine, March 1978, p. 229, 240

ACTIVITY--CANADA RESOURCE RECOVERY
CATEGORY-MILLS

NUCLEAR FACILITY PROFILE
PSM 17 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
Beaverlodge	Beaverlodge Saskatchewan		460 te/y	Oper	53	RDCM

LATITUDE- 59 DEG MIN N LONGITUDE-107 DEG MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Eldorado Nuclear Ltd

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-Conventional acid leaching

SCHEDULE-Expansion to 575 te in 1978 and 770 in 1980

REMARKS-Beaverlodge receives its feed from two small ore bodies,
Fay and Verna
Production summary 1953-1959: 3835.3 te; 1960-1969: 7452.6 te;
1970-1975: 2925.8 te

REFERENCES-

- 1-Foreign Uranium Supply, EPRI EA-725, pp. 3-103
- 2-International Data Collection and Analysis, NAC, Task 1, Vol II,
Canada, p. 28 to 32
- 3-Mining Magazine, March 1978, p. 229

ACTIVITY--CANADA RESOURCE RECOVERY
 CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 15 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
Key Lake	La Ronge Saskatchewan	URAN	2300te/y	Plan	83	RDCN

LATITUDE- 55 DEG 07 MIN N

LONGITUDE-105 DEG 18 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-SMDC, INEXCO,
 Uranerz Exploration and Mining Lt
 SAFEGUARDS-

SUPPLY SOURCE-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-Open pit mining

SCHEDULE-

REMARKS-SMDC- Saskatchewan Mining Development Company
 INEXCO- Inexco Mining Company (Canada) Ltd.
 Estimated reserves: 23000 te at 3% average ore grade

REFERENCES-

- 1-Mining Magazine, March 1978, p. 240
- 2-Mining Journal, Vol CCXC, #7453, 23 June 1978, p. 269
- 3-International Data Collection and Analysis, NAC, Vol II, Task 1,
 Canada, p. 21
- 4-Minerals Yearbook, 1974, Vol III, p. 235
- 5-Uranium Resources, Production and Demand, IAEA, Dec. 1977,
 pp. 55-62
- 6-Foreign Uranium Supply, EPRI EA-725, pp. 3-15, 3-110

ACTIVITY--CANADA RESOURCE RECOVERY
 CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 17 AUG 78

FACILITY NAME LOCATION
 Rabbit Lake Rabbit Lake
 Saskatchewan

FAC FAC
 TYPE CAPACITY STATUS YR CODE
 1730te/y Oper 75 RDCP

LATITUDE- 53 DEG 10 MIN N

LONGITUDE-107 DEG 46 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Gulf Minerals Canada
 Ltd. 51% & Uranerz Canada Ltd 49%

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-Open pit mining
 Milling by acid leach, solvent extraction

SCHEDULE-Production in 1976: 1432.69 te
 1975: 278.85 te

REMARKS-Average ore grade: 0.32%
 Reserves: 15400 te

REFERENCES-

- 1-Foreign Uranium Supply, EPRI EA-725, pp. 3-104 to 3-106
- 2-International Data Collection and Analysis, NAC, Task 1, Vol II,
 Canada, pp. 38 to 42
- 3-Minerals Yearbook, 1974, Vol III, p. 235

ACTIVITY--CANADA RESOURCE RECOVERY
CATEGORY-MILLS

NUCLEAR FACILITY PROFILE
PSM 17 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
Rabbit Lake	Rabbit Lake Saskatchewan		1730te/y	Oper	75	RDCQ

LATITUDE- 53 DEG 10 MIN N

LONGITUDE-107 DEG 46 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Gulf Minerals Canada
Ltd. 51% & Uranerz Canada Ltd 49%

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-Open pit mining

Milling by acid leach, solvent extraction

SCHEDULE-Production in 1976: 1432.69 te

1975: 278.85 te

REMARKS-Average ore grade: 0.32%

Reserves: 15400 te

REFERENCES-

- 1-Foreign Uranium Supply, EPRI EA-725, pp. 3-104 to 3-106
- 2-International Data Collection and Analysis, NAC, Task 1, Vol II, Canada, pp. 38 to 42
- 3-Minerals Yearbook, 1974, Vol III, p. 235

ACTIVITY--CANADA RESOURCE RECOVERY
 CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 23 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
Baker Lake	Baker Lake Northwest Territorie	URAN		Explor		RDCR

LATITUDE- 64 DEG 20 MIN N LONGITUDE- 96 DEG 10 MIN W

TECHNOLOGY SOURCE- OWNER/OPERATOR-Uranex

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

1-Foreign Uranium Supply, EPRI EA-725, pp. 3-33

ACTIVITY--CANADA RESOURCE RECOVERY
 CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 24 AUG 78

FACILITY NAME LOCATION
 Preston Elliot Lake
 Ontario

FAC FAC
 TYPE CAPACITY STATUS YR CODE
 URAN Inactv 61 RDCS

LATITUDE- 46 DEG 24 MIN N

LONGITUDE- 82 DEG 41 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Preston Mines Ltd.

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-To be reactivated 1984

REMARKS-Formerly Stanleigh mine which operated from 1958-1961
 Preston mines is 81% owned by Rio-Tinto Zinc (RTZ) which also owns
 44% of Rio Algom Ltd.
 Mine is dormant awaiting favorable economic conditions

REFERENCES-

- 1-Foreign Uranium Supply, EPRI EA-725, pp. 3-27
- 2-Uranium Resources, Production and Demand, IAEA, Dec 1977, p. 61
- 3-Mining Magazine, March 1978, p. 240

ACTIVITY--CANADA RESOURCE RECOVERY
CATEGORY--MILLS

NUCLEAR FACILITY PROFILE
PSM 18 AUG 78

FACILITY NAME LOCATION
Denison Elliot Lake
Ontario

FAC FAC
TYPE CAPACITY STATUS YR CODE
URAN 1900te/y Oper 57 RDCT

LATITUDE- 46 DEG 24 MIN N

LONGITUDE- 82 DEG 38 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Denison Mines Ltd.

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-Underground mining

Acid leach, ion exchange used at mill

SCHEDULE-

REMARKS-Denison is a unification of three smaller mills: Consolidated Denison Mines Ltd., Can-Met Explorations Ltd., and Stanrock Uranium Mines Ltd.

Production History 1957-1960: 7085.39 te; 1961-1965: 8389.54 te;
1966-1970: 3900.39 te; 1971-1975: 6658.39 te; 1976: 1196.92 te

REFERENCES-

- 1-Foreign Uranium Supply, EPRI EA-725, pp. 3-90 to 3-98
- 2-International Data Collection and Analysis, Task 1, Vol II, Canada, pp. 23 to 27

ACTIVITY--CANADA RESOURCE RECOVERY
 CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 18 AUG 78

FACILITY NAME	LOCATION	FAC	FAC
Rio Algon	Elliot Lake Ontario	TYPE CAPACITY STATUS	YR CODE
		URAN 1900te/y Oper	68 RDCU

LATITUDE- 46 DEG 24 MIN N

LONGITUDE- 82 DEG 38 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Rio Algon Mines Ltd

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-Underground mining

Acid leach, ion exchange used at mill

SCHEDULE-1980: 2700 te/y; 1982: 3075 te/y

REMARKS-Rio Algon has combined the following smaller mines: Quirke (Now the New Quirke mine), Panel, Nordic, Milliken, Buckles, Lacnor, Spanish American, Pronto
 Reserves exceed 38500 te
 Production History- 1969-1971: 4529.59 te; 1972-1974: 5733.47 te; 1975: 1784.23 te; 1976: 1724.23 te
 Production in the Elliot Lake Region began as early as 1956 in some of the smaller mines in the area.

REFERENCES-

- 1-Foreign Uranium Supply, EPRI EA-725, pp. 3-90 to 3-95
- 2-International Data Collection and Analysis, Task 1, Vol II, Canada, pp. 33-37
- 3-Minerals Yearbook, 1974, Vol III, p. 235
- 4-Uranium Resources, Production and Demand, IAEA, Dec 1977, pp. 55-62

ACTIVITY--CANADA RESOURCE RECOVERY
 CATEGORY--MILLS

NUCLEAR FACILITY PROFILE
 PSM 18 AUG 78

FACILITY NAME	LOCATION	FAC	FAC
Rio Algon	Elliot Lake Ontario	URAN 1900te/y	Oper 68 RDCV

LATITUDE- 46 DEG 24 MIN N LONGITUDE- 82 DEG 38 MIN W

TECHNOLOGY SOURCE- OWNER/OPERATOR-Rio Algon Mines Ltd

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-Underground Mining

Acid leach, ion exchange used at mill

SCHEDULE-1980: 2700 te/y; 1982: 3075 te/y

REMARKS-Rio Algon has combined the following smaller mines: Quirke
 (Now the New Quirke mine), Panel, Nordic, Milliken, Buckles, Lacnor,
 Spanish American, Pronto
 Reserves exceed 38500 te
 Production History- 1969-1971: 4529.59 te; 1972-1974: 5733.47 te;
 1975: 1784.23 te; 1976: 1724.23 te

REFERENCES-

- 1-Foreign Uranium Supply, EPRI EA-725, pp. 3-90 to 3-95
- 2-International Data Collection and Analysis, Task 1, Vol II,
 Canada, pp. 33-37
- 3-Minerals Yearbook, 1974, Vol III, p. 235
- 4-Uranium Resources, Production and Demand, IAEA, Dec 1977,
 pp. 55-62

ACTIVITY--CANADA RESOURCE RECOVERY
 CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 22 AUG 78

FACILITY NAME LOCATION
 Agnew Lake Sudbury
 Ontario

FAC	FAC
TYPE	CAPACITY STATUS YR CODE
URAN	270 te/y Oper 77 RDCW

LATITUDE- 46 DEG 30 MIN N

LONGITUDE- 81 DEG 01 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Kerr Addison Mines
 Ltd. (90%), Uranerx Mining (10%)

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-Underground mining
 Bacterial leaching

SCHEDULE-Expand to 385 te/y in 1978

REMARKS-Average ore grade: 0.069%

Some production occurred in the late 1960's but mine was closed
 shortly thereafter

REFERENCES-

- 1-Foreign Uranium Supply, EPRI EA-725, pp. 3-98 to 3-101
- 2-Minerals Yearbook, 1974, Bureau of Mines, Vol III, p. 235
- 3-Uranium Resources, Production and Demand, IAEA, Dec 1977,
 pp. 55-62
- 4-International Data Collection and Analysis, Task 1, Vol II, Canada

ACTIVITY--CANADA RESOURCE RECOVERY
 CATEGORY--MILLS

NUCLEAR FACILITY PROFILE
 PSM 22 AUG 78

FACILITY NAME LOCATION
 Agnew Lake Sudbury
 Ontario

FAC FAC
 TYPE CAPACITY STATUS YR CODE
 URAN 270 te/y Oper 77 RDCX

LATITUDE- 46 DEG 30 MIN N

LONGITUDE- 81 DEG 01 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Kerr Addison Mines
 Ltd. (90%), Uranerx Mining (10%)

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-Underground mining
 Bacterial leaching

SCHEDULE-Expand to 385 te/y in 1978

REMARKS-Average ore grade: 0.069%

Some production occurred in the late 1960's but was closed shortly thereafter

REFERENCES-

- 1-Foreign Uranium Supply, EPRI EA-725, pp. 3-98 to 3-101
- 2-Minerals Yearbook, 1974, Bureau of Mines, Vol III, p. 235
- 3-Uranium Resources, Production and Demand, IAEA, Dec 1977, pp. 55-62
- 4-International Data Collection and Analysis, Task 1, Vol II, Canada

ACTIVITY--CANADA RESOURCE RECOVERY
 CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 23 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
James Bay	James Bay Quebec	URAN		Explor		RDCZ

LATITUDE- 53 DEG MIN N LONGITUDE- 80 DEG MIN W

TECHNOLOGY SOURCE- OWNER/OPERATOR-INCO, JBDC, & Uranex

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS--JBDC- James Bay Development Company

REFERENCES-

1-Foreign Uranium Supply, EPRI EA-725, p. 3-31

ACTIVITY--CANADA RESOURCE RECOVERY
 CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 23 AUG 78

FACILITY NAME	LOCATION	FAC	FAC
Wollaston Lake	Wollaston Lake	TYPE CAPACITY	STATUS YR CODE
	Saskatchewan	URAN	Explor RDDA

LATITUDE- 58 DEG 02 MIN N LONGITUDE-101 DEG 13 MIN W

TECHNOLOGY SOURCE- OWNER/OPERATOR-PNC, SMDC

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-SMDC- Saskatchewan Mining Development Corporation
 PNC- Power Reactor and Nuclear Fuel Development Corporation (Japan)

REFERENCES-

1-Foreign Uranium Supply, EPRI EA-725, pp. 3-31

ACTIVITY--CANADA FUEL FABRICATION
 CATEGORY-FUEL FABRICATION PLANTS

NUCLEAR FACILITY PROFILE
 SRM 14 AUG 78

FACILITY NAME LOCATION
 Chalk River Nuclear Chalk River
 Laboratories

FAC FAC
 TYPE CAPACITY STATUS YR CODE
 UPuO (small) Inactv 76 RDDB

LATITUDE- 46 DEG 01 MIN N

LONGITUDE- 77 DEG 28 MIN W

TECHNOLOGY SOURCE-Canada, AECL

OWNER/OPERATOR-AECL (Atomic Energy
 of Canada Ltd.)

SUPPLY SOURCE-

SAFEGUARDS-NPT Safeguards
 Agreement

PRODUCT/USE-U-Pu mixed-oxide fuel

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-Lab-scale pilot plant currently inactive pending results of
 INFCE program

REMARKS-

REFERENCES-

- 1-Harmon, K.M.; Intl Source Book: A Compendium of Worldwide Programs
 in Nuclear Energy Supply and Radioactive Waste Management Research
 and Development; Vol I; 1/78
- 2-IAEA; The Annual Report for 1976; 7/77

ACTIVITY--CANADA RESOURCE RECOVERY
 CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 22 AUG 78

FACILITY NAME LOCATION
 Madawaska Bancroft
 Ontario

FAC FAC
 TYPE CAPACITY STATUS YR CODE
 URAN 320 te/y Oper 76 RDDC

LATITUDE- 45 DEG 03 MIN N

LONGITUDE- 77 DEG 52 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Madawaska Mines Ltd.

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-Open pit mining

SCHEDULE-1976: 50 te, 1977: 230 te, 320 te/y expected in 1978

REMARKS-Nearly 85% of the mine's production is committed to AGIP, an agency of the Italian government, who funded much of the venture. Owners: Federal Resources Corp. US (51%), Consolidated Canadian Faraday (49%)
 Reactivation of Faraday mine which operated from 1957 to 1964
 Average ore grade: 0.12%
 Indicated reserves: 1600 te; Inferred reserves: 1270 te
 These additional mines in Bancroft area operated from 1956-1963.

REFERENCES-

- 1-Foreign Uranium Supply, EPRI EA-725
- 2-International Data Collection and Analysis, NAC, Task 1, Vol II, Canada, pp. 47 to 51

ACTIVITY--CANADA RESOURCE RECOVERY
 CATEGORY-MILLS

NUCLEAR FACILITY PROFILE
 PSM 22 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
Madawaska	Bancroft Ontario	URAN	320 te/y	Oper	76	RDDD

LATITUDE- 45 DEG 03 MIN N

LONGITUDE- 77 DEG 52 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Madawaska Mines Ltd.

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-Open pit mining

SCHEDULE-1976: 50 te, 1977: 230 te, 320 te/y expected in 1978

REMARKS-Nearly 85% of the mines' production is committed to AGIP, an agency of the Italian government, who funded much of the venture. Owners: Federal Resources Corp. US (51%), Consolidated Canadian Faraday (49%)
 Reactivation of Faraday mine which operated from 1957 to 1964
 Average ore grade: 0.12%
 Indicated reserves: 1600 te; Inferred reserves: 1270 te

REFERENCES-

- 1-Foreign Uranium Supply, EPRI EA-725
- 2-International Data Collection and Analysis, NAC, Task 1, Vol II, Canada, pp. 47 to 51

ACTIVITY--CANADA RESOURCE RECOVERY
 CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 22 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
Kitts-Michelin	Makkovik Labrador	URAN		Explor	83	RDDE

LATITUDE- 55 DEG 00 MIN N

LONGITUDE- 59 DEG 10 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Brinex Urangesell-
 schaft

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-Underground mining

SCHEDULE-Capacity to reach 600 te/y about 1983

REMARKS-Brinex- British Newfoundland Explorations Ltd. holds 60%
 Urangesellschaft Canada Ltd. 40%

REFERENCES-

- 1-Foreign Uranium Supply, EPRI EA-725, pp. 3-16, 33, 112, 61
- 2-Mining Magazine, March 1978, p. 240

ACTIVITY--CANADA RESOURCE RECOVERY
 CATEGORY--CONVERSION PLANTS

NUCLEAR FACILITY PROFILE
 SRM 02 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	FAC YR CODE
Eldorado Nuclear Conversion Fac.	Port Granby (near Port Hope)	UF6	10000 te (te/yr)	Plan	81 RDDN
LATITUDE- 43 DEG 58 MIN N		LONGITUDE- 78 DEG 18 MIN W			

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Eldorado Nuclear
 Limited

SUPPLY SOURCE-

SAFEGUARDS-NPT Safeguards
 Agreement

PRODUCT/USE-UF6/feed for enrichment process

FUEL STORAGE CAPACITY-

PROCESS-Wet solvent extraction process

SCHEDULE-Planned for operation in 1981

REMARKS-MARKET STRATEGY- Will provide conversion services contracts
 in addition to Port Hope plant's capacity

REFERENCES-

1-NAC; Intl Data Collection and Analysis; Task 1, Vol II; 6/78

ACTIVITY--CANADA FUEL FABRICATION
 CATEGORY--HEAVY WATER PRODUCTION

NUCLEAR FACILITY PROFILE
 PSM 18 SEP 78

FACILITY NAME LOCATION
 Port Hawkesbury Port Hawkesbury
 Heavy Water Plant Nova Scotia
 LATITUDE- 45 DEG 36 MIN N

FAC FAC
 TYPE CAPACITY STATUS YR CODE
 400te/y Oper 70 RDFA

LONGITUDE- 61 DEG 22 MIN W

TECHNOLOGY SOURCE-Atomic Energy
 of Canada Limited
 SUPPLY SOURCE-

OWNER/OPERATOR-Canadian General
 Electric Co., Ltd.
 SAFEGUARDS-

PRODUCT/USE-99.75% D2O

FUEL STORAGE CAPACITY-

PROCESS-Standard H2S exchange (Girdler sulfide)

SCHEDULE-

REMARKS-

REFERENCES-

- 1-Heavy Water- A Layman's Guide, Atomic Energy of Canada, Ltd.
 AECL-4609, 8/73, pp. 2-3

ACTIVITY--CANADA FUEL FABRICATION
 CATEGORY--FUEL FABRICATION PLANTS

NUCLEAR FACILITY PROFILE
 SRM 14 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
Westinghouse Fuel Fabrication	Varenes	UO		Oper		RDHX
LATITUDE-	DEG	MIN	LONGITUDE-	DEG	MIN	

TECHNOLOGY SOURCE-

OWNER/OPERATOR--Westinghouse
 Canada

SUPPLY SOURCE-

SAFEGUARDS--NPT Safeguards Agreement

PRODUCT/USE--U-oxide fuel assemblies/Candu-type reactors

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE--Currently in operation

REMARKS-

REFERENCES-

1-IAEA; The Annual Report for 1976; 7/77

ACTIVITY--CANADA RESOURCE RECOVERY
 CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 23 AUG 78

FACILITY NAME LOCATION
 Johan Beetz Quebec

FAC	TYPE	CAPACITY	STATUS	YR	CODE
	URAN		Explor		RDJH

LATITUDE- 51 DEG MIN N

LONGITUDE- 63 DEG MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Imperial Oil in
 joint venture with Denison

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

1-Foreign Uranium Supply, EPRI EA-725, pp. 3-31

ACTIVITY--CANADA SPENT FUEL FABRICATION NUCLEAR FACILITY PROFILE
 CATEGORY--SEPARATE FUEL STORAGE FACILITIES SRM 15 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
Whiteshell	Whiteshell	SURF		Oper		RDJJ

Nucl Research Est. (Selkirk)

LATITUDE- 50 DEG 10 MIN N

LONGITUDE- 96 DEG 52 MIN W

TECHNOLOGY SOURCE-AECL (Atomic
 Energy of Canada Ltd)

OWNER/OPERATOR-AECL/Whiteshell
 Nuclear Research Establishment

SUPPLY SOURCE-Candu reactor
 spent fuel

SAFEGUARDS-NPT Safeguards Agreement

PRODUCT/USE-

FUEL STORAGE CAPACITY-Two silos- one with 138 fuel bundles from WR-1
 reactor, second with nominal capacity of 220 fuel bundles

PROCESS-Spent fuel stored in Concrete Surface Silo and cooled by
 conduction through lead liner and concrete or by convection

SCHEDULE-Currently undergoing tests for implementation of spent-fuel
 storage facility in 1985

REMARKS-Fuel bundles are sealed in thick metal container surrounded
 by concrete silo 2.4 meters in diameter, 5 meters tall, and with
 walls 0.8 meters thick. Silos are cooled by conduction through wall
 or by convection provided by venting.

REFERENCES-

- 1-Harmon, K.M.; Intl Source Book: A Compendium of Worldwide Programs
 in Nuclear Energy Supply and Radioactive Waste Management Research
 and Development; Vol I, 1/78
- 2-King, F.D. and W.H. Baker; "Interim Storage of Spent-Fuel
 Assemblies;" Proceedings: Intl Symp on the Management of Wastes
 from the LWR Fuel Cycle; Denver, Col; 7/11-16/76
- 3-IAEA Bulletin; Vol XIX, No 5; 10/77

ACTIVITY--CANADA WASTE MANAGEMENT
 CATEGORY--WASTE DISPOSAL FACILITIES

NUCLEAR FACILITY PROFILE
 SRM 15 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
	White Lake	ROCK		Oper		RDJK

LATITUDE- 45 DEG 22 MIN N

LONGITUDE- 76 DEG 29 MIN W

TECHNOLOGY SOURCE-AECL (Atomic
 Energy of Canada Ltd)
 SUPPLY SOURCE-

OWNER/OPERATOR-AECL/Whiteshell
 Nuclear Research Establishment
 SAFEGUARDS-NPT Safeguards Agreement

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-Hard rock (granite formation) repository for spent-fuel
 storage or waste disposal

SCHEDULE-Currently testing equipment and theoretical concepts

REMARKS-

REFERENCES-

- 1-Harmon, K.M.; Intl Source Book: A Compendium of Worldwide Programs
 in Nuclear Energy Supply and Radioactive Waste Management Research
 and Development; Vol I; 1/78
- 2-IAEA Bulletin; Vol XIX, No 5; 10/77

ACTIVITY--CANADA SPENT FUEL PROCESSING NUCLEAR FACILITY PROFILE
 CATEGORY--SEPERATE FUEL STORAGE FACILITIES SRM 14 AUG 78

FACILITY NAME	LOCATION	FAC	FAC
Chalk River Nuclear Laboratories	Chalk River	TYPE HOLE	STATUS Oper
LATITUDE- 46 DEG 01 MIN N		LONGITUDE- 77 DEG 28 MIN W	

TECHNOLOGY SOURCE-AECL (Atomic Energy of Canada Ltd)	OWNER/OPERATOR-AECL/Chalk River Nuclear Laboratories
SUPPLY SOURCE-Candu reactor spent fuel	SAFEGUARDS-NPT Safeguards Agreement
PRODUCT/USE-	

FUEL STORAGE CAPACITY-Not known- spacing of holes is determined by criticality requirements and dissipation of heat load
 PROCESS-Spent fuel stored in tile-lined and concrete plugged holes in the ground
 SCHEDULE-Currently in operation

REMARKS-Holes are about 5 meters deep and can hold up to 10 Candu-type fuel rods. Groundwater is kept away from fuel by choice of suitable location and surface water is kept away by hole liner and fuel package.

REFERENCES-

- 1-Harmon, K.M.; Intl Source Book: A Compendium of Worldwide Programs in Nuclear Energy Supply and Radioactive Waste Management Research and Development; Vol I; 1/78
- 2-King, F.D. and W.H. Baker; "Interim Storage of Spent-Fuel Assemblies;" Proceedings: Intl Symp on the Management of Wastes from the LWR Fuel Cycle; Denver, Col; 7/11-16/76
- 3-IAEA Bulletin; Vol XIX, No 5; 10/77

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ACTIVITY--CANADA SPENT FUEL PROCESSING NUCLEAR FACILITY PROFILE
CATEGORY--SEPARATE FUEL STORAGE FACILITIES SRM 15 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR CODE
Pickering Nucl Power Center	Pickering	POOL		Oper	RDJM
LATITUDE-	DEG	MIN	LONGITUDE-	DEG	MIN

TECHNOLOGY SOURCE- OWNER/OPERATOR-Ontario Hydro

SUPPLY SOURCE-Pickering power reactors SAFEGUARDS-NPT Safeguards Agreement
PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-Pool-type storage

SCHEDULE-Currently in operation

REMARKS-Plans to install pools with capacity of 5 station-years of full operation at future power generating stations.

REFERENCES-

- 1-Harmon, K.M.; Intl Source Book: A Compendium of Worldwide Programs in Nuclear Energy Supply and Radioactive Waste Management Research and Development; Vol I; 1/78
- 2-IAEA Bulletin; Vol XIX, No 5; 10/77

ACTIVITY--CANADA SPENT FUEL PROCESSING NUCLEAR FACILITY PROFILE
 CATEGORY--SEPARATE FUEL STORAGE FACILITIES SRM 15 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
Bruce Nuclear Power Center	Tiverton	POOL		Oper		RDJN

LATITUDE- 44 DEG 15 MIN N

LONGITUDE- 81 DEG 33 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Ontario Hydro

SUPPLY SOURCE-Bruce power
reactors
PRODUCT/USE-

SAFEGUARDS-NPT Safeguards Agreement

FUEL STORAGE CAPACITY-

PROCESS-Pool-type storage

SCHEDULE-Currently in operation

REMARKS-Plans to install pools with capacity of 5 station-year of
full operation at future power generating stations.

REFERENCES-

- 1-Harmon, K.M.; Intl Source Book: A Compendium of Worldwide Programs
in Nuclear Energy Supply and Radioactive Waste Management Research
and Development; Vol I; 1/78
- 2-IAEA Bulletin; Vol XIX, No 5; 10/77

CA 45

ACTIVITY--CANADA FUEL FABRICATION
CATEGORY--HEAVY WATER PRODUCTION

NUCLEAR FACILITY PROFILE
PSM 18 SEP 78

FACILITY NAME LOCATION
Glace Bay Glace Bay
Heavy Water Plant Nova Scotia
LATITUDE- 46 DEG 11 MIN N

FAC FAC
TYPE CAPACITY STATUS YR CODE
400 te/y Oper 76 RDJP

LONGITUDE- 59 DEG 58 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR--AECL, Canatom

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE--99.75% D2O

FUEL STORAGE CAPACITY-

PROCESS--Conventional exchange with H2S (Girdler sulfide)

SCHEDULE--Initial attempt at operation by private industry failed.
('68) Reorganized by AECL ('71)

REMARKS--AECL- Atomic Energy of Canada, Ltd.

REFERENCES-

- 1-Heavy Water: A Layman's Guide, Atomic Energy of Canada, Ltd.
AECL-4609, 8/73, pp. 2-3

CA 46

ACTIVITY--CANADA FUEL FABRICATION
CATEGORY--HEAVY WATER PRODUCTION

NUCLEAR FACILITY PROFILE
PSM 18 SEP 78

FACILITY NAME LOCATION
Bruce A Douglas Point
Heavy Water Plant Ontario
LATITUDE- 44 DEG 20 MIN N

FAC FAC
TYPE CAPACITY STATUS YR CODE
800 te/y Oper 73 RDJQ

LONGITUDE- 81 DEG 35 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Ontario Hydro

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-D2O (99.75% pure)

FUEL STORAGE CAPACITY-

PROCESS-Conventional exchange using H25

SCHEDULE-

REMARKS-

REFERENCES-

- 1-Heavy Water: A Layman's Guide, Atomic Energy of Canada, Ltd.
AECL-4609, 8/73, pp. 2-3

CA 47

ACTIVITY--CANADA FUEL FABRICATION
CATEGORY--HEAVY WATER PRODUCTION

NUCLEAR FACILITY PROFILE
PSM 19 SEP 78

FACILITY NAME LOCATION
Bruce B Douglas Point
 Ontario

FAC FAC
TYPE CAPACITY STATUS YR CODE
800 te/y Constr 78 RDJR

LATITUDE- 44 DEG 20 MIN N

LONGITUDE- 81 DEG 35 MIN W

TECHNOLOGY SOURCE--AECL

OWNER/OPERATOR--Ontario Hydro

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE--D2O (99.7%+ pure)

FUEL STORAGE CAPACITY-

PROCESS--Girdler Sulfide

SCHEDULE-

REMARKS--AECL- Atomic Energy of Canada, Ltd.

REFERENCES-

- 1-Claims and Comments: Pressurized Heavy Water Reactor--Pressurized Water Reactor, Westinghouse Nuclear Energy Systems

ACTIVITY--CANADA FUEL FABRICATION
 CATEGORY--HEAVY WATER PRODUCTION

NUCLEAR FACILITY PROFILE
 PSM 19 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
Bruce C	Douglas Point Ontario		800 te/y	Plan	80	RDJS

LATITUDE- 44 DEG 20 MIN N

LONGITUDE- 81 DEG 35 MIN W

TECHNOLOGY SOURCE-AECL

OWNER/OPERATOR-Ontario Hydro

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-D2O (99.75%+ pure)

FUEL STORAGE CAPACITY-

PROCESS-Girdler Sulfide

SCHEDULE-

REMARKS-AECL- Atomic Energy of Canada, Ltd.

REFERENCES-

1-Claims and Comments: Pressurized Heavy Water Reactor-Pressurized
 Water Reactor, Westinghouse Nuclear Energy Systems

CA 49

ACTIVITY--CANADA FUEL FABRICATION
CATEGORY--HEAVY WATER PRODUCTION

NUCLEAR FACILITY PROFILE
PSM 19 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
Bruce D	Douglas Point Ontario		800 te/y	Plan	79	RDJT

LATITUDE- 44 DEG 20 MIN N

LONGITUDE- 81 DEG 35 MIN W

TECHNOLOGY SOURCE-AECL

OWNER/OPERATOR-Ontario Hydro

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-D2O (99.7%+ pure)

FUEL STORAGE CAPACITY-

PROCESS-Girdler Sulfide

SCHEDULE-

REMARKS-AECL- Atomic Energy of Canada, Ltd.

REFERENCES-

1-Claims and Comments: Pressurized Heavy Water Reactor-Pressurized Water Reactor, Westinghouse Nuclear Energy Systems

ACTIVITY--CANADA RESOURCE RECOVERY
 CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 24 AUG 78

FACILITY NAME

LOCATION
 Port Radium
 Northwest Territory

FAC	FAC
TYPE CAPACITY STATUS YR CODE	
URAN	Inactv 60 RDJU

LATITUDE- 66 DEG 04 MIN N

LONGITUDE-118 DEG 00 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Eldorado Nuclear Ltd

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-Production of uranium began in 1943

REMARKS-

REFERENCES-

1-Foreign Uranium Supply, EPRI EA-725, pp. 3-12, 3-20

CA 51

ACTIVITY--CANADA RESOURCE RECOVERY NUCLEAR FACILITY PROFILE
CATEGORY-MINES (URANIUM & THORIUM) PSM 15 AUG 78

FACILITY NAME	LOCATION	FAC	TYPE	CAPACITY	STATUS	YR	CODE
Rayrock	Lake Marion	URAN			Inactv	57	RDJV

Northwest Territory
LATITUDE- DEG MIN LONGITUDE- DEG MIN

TECHNOLOGY SOURCE- OWNER/OPERATOR-Rayrock Mines Ltd.

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-First production: 6/57, Production ceased: 7/59

REMARKS-

REFERENCES-

1-Foreign Uranium Supply, EPRI EA-725, pp. 3-7

ACTIVITY--CANADA RESOURCE RECOVERY
 CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 25 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
	Great Slave Lake	URAN		Explor		RDJW
	Northwest Territory					

LATITUDE- DEG MIN LONGITUDE- DEG MIN

TECHNOLOGY SOURCE- OWNER/OPERATOR-Rio Algom

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

1-Foreign Uranium Supply, EPRI EA-725, pp. 3-31, 32

ACTIVITY--CANADA RESOURCE RECOVERY
 CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 25 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
	St. Armand	URAN		Explor		RDJX
	Quebec					
LATITUDE-	DEG	MIN	LONGITUDE-	DEG	MIN	

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Rio Algom (10%)
 Soquem (90%)

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

- 1-Foreign Uranium Supply, EPRI EA-725, pp. 3-31, 32

ACTIVITY--CANADA RESOURCE RECOVERY NUCLEAR FACILITY PROFILE
 CATEGORY-MINES (URANIUM & THORIUM) PSM 25 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
	Otish Mountains Quebec	URAN		Explor		RDJY

LATITUDE- 52 DEG 30 MIN N

LONGITUDE- 70 DEG 30 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Rio Algom, Gulf,
Soquem, Quebec Hydro

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

1-Foreign Uranium Supply, EPRI EA-725, pp. 3-31, 32

CA 55

ACTIVITY--CANADA RESOURCE RECOVERY
CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 25 AUG 78

FACILITY NAME

LOCATION

FAC

FAC

TYPE CAPACITY STATUS YR CODE

Mont Laurier

URAN

Explor

RDJZ

Quebec

LATITUDE- 46 DEG 33 MIN N

LONGITUDE- 75 DEG 31 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Denison Imperial Oil
Johns-Mansville & Urangesellschaft

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

1-Foreign Uranium Supply, EPRI EA-725, pp. 3-31, 32

ACTIVITY--CANADA RESOURCE RECOVERY
 CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 25 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
Charlebois Lake	Charlebois Lake Saskatchewan	URAN		Explor		RDKA

LATITUDE- DEG MIN LONGITUDE- DEG MIN

TECHNOLOGY SOURCE- OWNER/OPERATOR-Denison, SMDC,
 Urangesellschaft
 SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

1-Foreign Uranium Supply, EPRI EA-725, pp. 3-31, 32

ACTIVITY--CANADA RESOURCE RECOVERY
 CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 25 AUG 78

FACILITY NAME	LOCATION	FAC	CAPACITY	STATUS	YR	CODE
	St. Germaine Lake					FAC
	Northwest Territory	TYPE				RDKB

LATITUDE-	DEG	MIN	LONGITUDE-	DEG	MIN
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TECHNOLOGY SOURCE- OWNER/OPERATOR-Cominco

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

- 1-Foreign Uranium Supply, EPRI EA-725, pp. 3-31, 32

ACTIVITY--CANADA RESOURCE RECOVERY
 CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 25 AUG 78

FACILITY NAME	LOCATION	FAC	FAC
	Tye Lake	TYPE CAPACITY STATUS YR	CODE
	British Columbia		RDKC

LATITUDE- DEG MIN LONGITUDE- DEG MIN

TECHNOLOGY SOURCE- OWNER/OPERATOR-Noranda

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

- 1-Foreign Uranium Supply, EPRI EA-725, pp. 3-31, 32

CA 59

ACTIVITY--CANADA RESOURCE RECOVERY
CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 25 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
	Mazenod Lake					RDKD

LATITUDE-	DEG	MIN	LONGITUDE-	DEG	MIN
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TECHNOLOGY SOURCE- OWNER/OPERATOR-Noranda

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

1-Foreign Uranium Supply, EPRI EA-725, pp. 3-31, 32

CA 60

ACTIVITY--CANADA RESOURCE RECOVERY
CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 25 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
	Dudderidge Lake Saskatchewan					RDKE

LATITUDE- DEG MIN LONGITUDE- DEG MIN

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Noranda, SMDC, Thor
& Brascan

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

1-Foreign Uranium Supply, EPRI EA-725, pp. 3-31, 32

CA 61

ACTIVITY--CANADA RESOURCE RECOVERY
CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 25 AUG 78

FACILITY NAME

LOCATION

FAC FAC
TYPE CAPACITY STATUS YR CODE
RDKF

Thunder Bay
Ontario

LATITUDE- 48 DEG 20 MIN N

LONGITUDE- 89 DEG MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-British Petroleum &
Rio Tinto Zinc

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

1-Foreign Uranium Supply, EPRI EA-725, pp. 3-31, 32

CA 62

ACTIVITY--CANADA RESOURCE RECOVERY
CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 25 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE	RDKG
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Cape Dorset

LATITUDE- 64 DEG 10 MIN N

LONGITUDE- 76 DEG 40 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Imperial Oil

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

1-Foreign Uranium Supply, EPRI EA-725, pp. 3-31, 32

CA 63

ACTIVITY--CANADA RESOURCE RECOVERY
CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 25 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
	Ungara Quebec					RDKH

LATITUDE- DEG MIN LONGITUDE- DEG MIN

TECHNOLOGY SOURCE- OWNER/OPERATOR-Imperial Oil

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

1-Foreign Uranium Supply, EPRI EA-725, pp. 3-31, 32

ACTIVITY--CANADA RESOURCE RECOVERY
 CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 25 AUG 78

FACILITY NAME	LOCATION	FAC	FAC
	Jourdan Lake	TYPE CAPACITY STATUS YR	CODE
	Quebec		RDKJ

LATITUDE-	DEG	MIN	LONGITUDE-	DEG	MIN
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TECHNOLOGY SOURCE- OWNER/OPERATOR-Imperial Oil

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

1-Foreign Uranium Supply, EPRI EA-725, pp. 3-31, 32

CA 65

ACTIVITY--CANADA RESOURCE RECOVERY
CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 25 AUG 78

FACILITY NAME LOCATION
Sakami Lake
Quebec

FAC FAC
TYPE CAPACITY STATUS YR CODE
RDKK

LATITUDE- 53 DEG 10 MIN N

LONGITUDE- 77 DEG 00 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-INCO & JBDC

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

1-Foreign Uranium Supply, EPRI EA-725, pp. 3-31, 32

ACTIVITY--CANADA RESOURCE RECOVERY
CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 25 AUG 78

FACILITY NAME

LOCATION

FAC

FAC

TYPE CAPACITY STATUS YR CODE

RDKM

Lake Athabaska
Alberta

LATITUDE- 59 DEG 30 MIN N

LONGITUDE-110 DEG MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Shell, Eldorado

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

1-Foreign Uranium Supply, EPRI EA-725, pp. 3-31, 32

ACTIVITY--CANADA RESOURCE RECOVERY
CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 25 AUG 78

FACILITY NAME

LOCATION
Blind River
Ontario

FAC FAC
TYPE CAPACITY STATUS YR CODE
RDKN

LATITUDE- 46 DEG 12 MIN N

LONGITUDE- 82 DEG 59 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Conwest, Eldorado

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

1-Foreign Uranium Supply, EPRI EA-725, pp. 3-31, 32

CA 69

ACTIVITY--CANADA RESOURCE RECOVERY
CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 25 AUG 78

FACILITY NAME

LOCATION
Cobequid Mountain
Nova Scotia

FAC
TYPE CAPACITY STATUS YR CODE
FAC
RDKP

LATITUDE- 45 DEG 30 MIN N

LONGITUDE- 63 DEG 30 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Gulf

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

1-Foreign Uranium Supply, EPRI EA-725, pp. 3-31, 32

CA 70

ACTIVITY--CANADA RESOURCE RECOVERY
CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 25 AUG 78

FACILITY NAME LOCATION
 Churchill
 Manitoba

FAC FAC
TYPE CAPACITY STATUS YR CODE
 RDKQ

LATITUDE- 58 DEG 45 MIN N

LONGITUDE- 94 DEG 00 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Eldorado, Imperial,
Warren Explor, & Manitoba Mineral
SAFEGUARDS-

SUPPLY SOURCE-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

1-Foreign Uranium Supply, EPRI EA-725, pp. 3-31, 32

CA 71

ACTIVITY--CANADA RESOURCE RECOVERY
CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 25 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
	Dismal Lake					RDKR
	Northwest Territory					

LATITUDE- 67 DEG MIN N LONGITUDE-117 DEG MIN W

TECHNOLOGY SOURCE- OWNER/OPERATOR-Eldorado, Imperial
Oil, & British Petroleum
SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

1-Foreign Uranium Supply, EPRI EA-725, pp. 3-31, 32

CA 72

ACTIVITY--CANADA RESOURCE RECOVERY
CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 25 AUG 78

FACILITY NAME LOCATION
 Fond du Lac
 Saskatchewan

FAC FAC
TYPE CAPACITY STATUS YR CODE
 RDKS

LATITUDE- 59 DEG 20 MIN N

LONGITUDE-107 DEG 09 MIN W

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Amok, Eldorado &
Sask Mining & Development Co.

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

1-Foreign Uranium Supply, EPRI EA-725, pp. 3-31, 32

ACTIVITY--CANADA FUEL FABRICATION
 CATEGORY--HEAVY WATER PRODUCTION

NUCLEAR FACILITY PROFILE
 PSM 19 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
La Prade	La Prade Quebec		800 te/y	Constr	79	RDKU

LATITUDE- DEG MIN LONGITUDE- DEG MIN

TECHNOLOGY SOURCE-AECL

OWNER/OPERATOR-Ontario Hydro

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-D2O (99.7%+ pure)

FUEL STORAGE CAPACITY-

PROCESS-Girdler Sulfide

SCHEDULE-Difficulties with construction and political consensus
 may delay completion until 1982

REMARKS-AECL- Atomic Energy of Canada, Ltd.

REFERENCES-

- 1-Claims and Comments: Pressurized Heavy Water Reactor-Pressurized Water Reactor, Westinghouse Nuclear Energy Systems Nucleonics Week, 15 December 1977, p. 6

CA 74

ACTIVITY--CANADA FUEL FABRICATION NUCLEAR FACILITY PROFILE
CATEGORY--HEAVY WATER PRODUCTION PSM 26 SEP 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR CODE
	Trail		6 te/y	Inactv	RDKV
	British Columbia				

LATITUDE- 49 DEG 04 MIN N LONGITUDE-117 DEG 39 MIN W

TECHNOLOGY SOURCE- OWNER/OPERATOR-Cominco

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Heavy water (99.7%+ pure)

FUEL STORAGE CAPACITY-

PROCESS-Gas phase heterogeous catalyst

SCHEDULE-Start up- 1945

REMARKS-

REFERENCES-

1-Nuclear Engineering International, Vol XXI, No 248, September 1976, pp. 61-68

CA 75

ACTIVITY--CANADA WASTE MANAGEMENT
CATEGORY--WASTE DISPOSAL FACILITIES

NUCLEAR FACILITY PROFILE
SRM 23 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
Chalk R Nucl Lab	Chalk River	PREP	200 kg/h (kg/hr)	Inactv	60	RDKW

LATITUDE- 46 DEG 01 MIN N

LONGITUDE- 77 DEG 28 MIN W

TECHNOLOGY SOURCE-Canada, AECL

OWNER/OPERATOR-AECL (Atomic Energy
of Canada Limited)

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-Incineration of low-level wastes; dual chamber, 815-1200
degrees C, tilting grade, propane fired

SCHEDULE-Started operation about 1960; currently inactive

REMARKS-

REFERENCES-

- 1-ERDA; Alternatives for Managing Wastes from Reactors and Post-Fission Operations of the LWR Fuel Cycle; Vol II; 5/76

ACTIVITY--CANADA WASTE MANAGEMENT
 CATEGORY--WASTE DISPOSAL FACILITIES

NUCLEAR FACILITY PROFILE
 SRM 23 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
RWVRF	Tiverton	PREP		Oper	77	RDKX

LATITUDE- 44 DEG 15 MIN N

LONGITUDE- 81 DEG 33 MIN W

TECHNOLOGY SOURCE-Canada, AECL
 and Ontario Hydro
 SUPPLY SOURCE-

OWNER/OPERATOR-Ontario Hydro/Bruce
 Nuclear Power Development
 SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-Incineration of low-level wastes; dual chamber, starved air

SCHEDULE-Currently in operation since 1977

REMARKS-RWVRF (Radioactive Waste Volume Reduction Facility) consists
 of incinerator and waste compactor

REFERENCES-

- 1-ERDA; Alternatives for Managing Wastes from Reactors and Post-Fission Operations of the LWR Fuel Cycle; Vol II; 5/76
- 2-Harmon, K.M.; Intl Source Book: A Compendium of Worldwide Programs in Nuclear Energy Supply and Radioactive Waste Management Research and Development; Vol I; 1/78

ACTIVITY--CANADA WASTE MANAGEMENT
CATEGORY--WASTE DISPOSAL FACILITIES

NUCLEAR FACILITY PROFILE
SRM 24 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
Chalk R Nucl Lab (CRNL)	Chalk River	PREP		Oper		RDKY

LATITUDE- 46 DEG 01 MIN N

LONGITUDE- 77 DEG 28 MIN W

TECHNOLOGY SOURCE-Canada, AECL

OWNER/OPERATOR-AECL (Atomic Energy
Limited)

SUPPLY SOURCE-Reverse osmosis
volume reduction unit- CRNL

SAFEGUARDS-

PRODUCT/USE-Solidified bitumen and waste mixture

FUEL STORAGE CAPACITY-

PROCESS-Bitumenization of non-high-level wastes using screw-extruder
process

SCHEDULE-Currently in operation

REMARKS-

REFERENCES-

- 1-Harmon, K.M.; Intl Source Book: A Compendium of Worldwide Programs in Nuclear Energy Supply and Radioactive Waste Management Research and Development; Vol I; 1/78

ACTIVITY--CANADA RESOURCE RECOVERY NUCLEAR FACILITY PROFILE
 CATEGORY--MINES (URANIUM & THORIUM) PSM 18 AUG 78

FACILITY NAME	LOCATION	FAC	FAC
		TYPE CAPACITY STATUS YR	CODE
Denison	Elliot Lake Ontario	URAN 1900te/y Oper	57 RDKZ

LATITUDE- 46 DEG 24 MIN N LONGITUDE- 82 DEG 38 MIN W

TECHNOLOGY SOURCE- OWNER/OPERATOR-Denison Mines Ltd.

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-Underground Mining
 Acid leach, ion exchange used at mill
 SCHEDULE-

REMARKS-Denison is a unification of three smaller mines: Consolidated Denison Mines Ltd., Can-Met Explorations Ltd., and Stanrock Uranium Mines Ltd
 Production History 1957-1960: 7085.39 te; 1961-1965: 8389.54 te;
 1966-1970: 3900.39 te, 1971-1975: 6658.39 te; 1976: 1196.92 te

REFERENCES-

- 1-Foreign Uranium Supply, EPRI EA-725, pp. 3-90 to 3-98
- 2-International Data Collection and Analysis, Task 1, Vol II, Canada, pp. 23 to 27

CT 1

ACTIVITY--CENTRAL AFRICAN REPUBLIC FUEL SUPPLY NUCLEAR FACILITY PROFILE
CATEGORY--MINES (URANIUM & THORIUM) PSM 26 JUL 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
	Bakouma	URAN	1000te/y	Plan	81	RCAA

LATITUDE- 05 DEG 41 MIN N

LONGITUDE- 22 DEG 50 MIN E

TECHNOLOGY SOURCE-

OWNER/OPERATOR-Central African
Uranium Company (URCA)

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-Pit mining

SCHEDULE-

REMARKS-Average grade of ore 0.26%
Bakouma consists of six deposits:
1-Particia (6000 te U)
2-Patou (4000 te U)
3-Pama (3000 te U)
4-Palmyre
5-Pamela
6-Paquette

REFERENCES-

- 1-Uranium: Resources, Production and Demand, IAEA, Dec. 1977
pp. 62-64
- 2-Mining Magazine, March 1978, p. 251
- 3-Minerals Yearbook, 1974, Vol III, pp. 1156-1157
- 4-Foreign Uranium Supply, EPRI EA-725, pp. 5-11 to 5-13

CH 1

ACTIVITY--CHINA (PR) ENRICHMENT PLANTS
CATEGORY--ENRICHMENT PLANTS

NUCLEAR FACILITY PROFILE
SRM 19 JUL 78

FACILITY NAME LOCATION
China 1 Lanchou

FAC FAC
TYPE CAPACITY STATUS YR CODE
DIFF 180 KSWU Oper 63 RPCB

LATITUDE- 36 DEG 01 MIN N

LONGITUDE-103 DEG 45 MIN E

TECHNOLOGY SOURCE-USSR

OWNER/OPERATOR-Chinese Government

SUPPLY SOURCE-

SAFEGUARDS-No safeguards

PRODUCT/USE-U235 enriched uranium-Military grade (94%)

FUEL STORAGE CAPACITY-

PROCESS-Gaseous Diffusion

SCHEDULE-Currently in operation

REMARKS-

PRODUCTION HISTORY-Enrichment to military grade (94%), presumably for use solely in Chinese weapons manufacture and testing

REFERENCES-

- 1-Nucl Eng Intl; Vol XXI, No 250; 11/76
- 2-Nucleonics Week; 1/13/78
- 3-IAEA Bulletin; Vol XIX, No 5; 10/77

ACTIVITY--CHINA (P.R.) RESOURCE RECOVERY NUCLEAR FACILITY PROFILE
 CATEGORY-MINES (URANIUM & THORIUM) PSM 19 JUL 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
	Kuetchou	UTh		Oper		RPCD

LATITUDE- DEG MIN LONGITUDE- DEG MIN

TECHNOLOGY SOURCE-

OWNER/OPERATOR-

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium, Thorium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-Milling believed to occur near mine. Uranium and Thorium resources both located here.

REFERENCES-

1-Nucleonics Week, 12 Jan 1978, p. 3

ACTIVITY--CHINA (P.R.) RESOURCE RECOVERY
 CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 19 JUL 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
	Tsinghai	UTh		Oper		RPCE

LATITUDE-- DEG MIN LONGITUDE-- DEG MIN

TECHNOLOGY SOURCE-- OWNER/OPERATOR--

SUPPLY SOURCE-- SAFEGUARDS--

PRODUCT/USE-Uranium, Thorium

FUEL STORAGE CAPACITY--

PROCESS--

SCHEDULE--

REMARKS--Milling believed to occur near mine. Uranium and Thorium resources both located here.

REFERENCES--

1-Nucleonics Week, 1/12/78, p. 3

ACTIVITY--CHINA (P.R.) RESOURCE RECOVERY
 CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 19 JUL 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
	Szechwan	Uth		Oper		RPCF

LATITUDE- DEG MIN LONGITUDE- DEG MIN

TECHNOLOGY SOURCE-

OWNER/OPERATOR-

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium, Thorium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-Milling believed to occur near mine. Uranium and Thorium
 resources both located here.

REFERENCES-

1-Nucleonics Week, 1/12/78, p. 3

ACTIVITY--CHINA (P.R.) RESOURCE RECOVERY
 CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 19 JUL 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
	Sinkiang	Uth		Oper		RPCG

LATITUDE- DEG MIN LONGITUDE- DEG MIN

TECHNOLOGY SOURCE-

OWNER/OPERATOR-

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium, Thorium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-Milling believed to occur near mine. Uranium and Thorium
 resources both located here.

REFERENCES-

1-Nucleonics Week, 1/12/78, p. 3

ACTIVITY--CHINA (PR) ENRICHMENT PLANTS NUCLEAR FACILITY PROFILE
 CATEGORY--ENRICHMENT PLANTS SRM 24 JUL 78

FACILITY NAME	LOCATION	FAC TYPE LASR	CAPACITY	STATUS R&D	YR	FAC
						CODE RPCH

LATITUDE-	DEG	MIN	LONGITUDE-	DEG	MIN
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TECHNOLOGY SOURCE- OWNER/OPERATOR-

SUPPLY SOURCE- SAFEGUARDS-

PRODUCT/USE-

FUEL STORAGE CAPACITY-

PROCESS-Laser isotope separation

SCHEDULE-Research and development in progress

REMARKS-

REFERENCES-

- 1-Nonproliferation Issues; Hearings, Subcommittee on Arms Control, Committee on Foreign Affairs; U.S. Senate, 94th Congress; Published 1977

CH 7

ACTIVITY--CHINA (P.R.) RESOURCE RECOVERY
CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
PSM 03 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
	Chuannan Kiangsi	URAN		Oper		RPCJ

LATITUDE- 24 DEG 40 MIN N

LONGITUDE-114 DEG 30 MIN E

TECHNOLOGY SOURCE-

OWNER/OPERATOR-

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-Also Ch'ien-nan

REFERENCES-

- 1-The People's Republic of China-A New Industrial Power With a Strong Mineral Base, K.P. Wang, U.S Bureau of Mines, 1975, p. 27, 94, fig. #5
- 2-Mining Magazine, Annual Review, 1977, p. 391

ACTIVITY--CHINA (P.R.) RESOURCE RECOVERY
 CATEGORY-MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 03 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	CODE
	Chuchou Hunan	URAN		Oper		RPCK

LATITUDE- 27 DEG 50 MIN N

LONGITUDE-113 DEG 12 MIN E

TECHNOLOGY SOURCE-

OWNER/OPERATOR-

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-Also Chu-Chou

REFERENCES-

- 1-The People's Republic of China-A New Industrial Power With a Strong Mineral Base, K.P. Wang, U.S. Bureau of Mines, 1975, p. 94
- 2-Mining Magazine, Annual Review, 1977, p. 391

ACTIVITY--CHINA (P.R.) RESOURCE RECOVERY
 CATEGORY--MINES (URANIUM & THORIUM)

NUCLEAR FACILITY PROFILE
 PSM 03 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
	Chushan Kiangsi	URAN		Oper		RPCL

LATITUDE- DEG MIN LONGITUDE- DEG MIN

TECHNOLOGY SOURCE-

OWNER/OPERATOR-

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

1-Minerals Yearbook, 1974, Vol III, p. 260

ACTIVITY--CHINA (P.R.) RESOURCE RECOVERY NUCLEAR FACILITY PROFILE
 CATEGORY-MINES (URANIUM & THORIUM) PSM 03 AUG 78

FACILITY NAME	LOCATION	FAC TYPE	CAPACITY	STATUS	YR	FAC CODE
Hsia Chuang	Weiyuan Kwangtung	URAN		Oper		RPCM

LATITUDE- 29 DEG 35 MIN N

LONGITUDE-104 DEG 40 MIN E

TECHNOLOGY SOURCE-

OWNER/OPERATOR-

SUPPLY SOURCE-

SAFEGUARDS-

PRODUCT/USE-Uranium

FUEL STORAGE CAPACITY-

PROCESS-

SCHEDULE-

REMARKS-

REFERENCES-

- 1-The People's Republic of China-A New Industrial Power With a Strong Mineral Base, K.P. Wang, U.S. Bureau of Mines, 1975, p. 27
- 2-Minerals Yearbook, 1974, Vol III, p. 260