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**SPENT FUEL/
REPROCESSING**

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SUMMARY DISCHARGE URANIUM REPORT BY REACTOR TYPE
(MTU)
East Europe

Discharge Year	Firm Reactors					Futura					Firm + Futura					Cum.
	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	
Prior	0	9268	86	16444	25798	0	0	0	0	0	0	9268	86	16444	25798	25798
1998	0	683	89	592	1363	0	0	0	0	0	0	683	89	592	1363	27162
1999	0	687	89	595	1370	0	0	0	0	0	0	687	89	595	1370	28532
2000	0	679	89	586	1354	0	0	0	0	0	0	679	89	586	1354	29886
2001	0	743	89	687	1519	0	0	0	0	0	0	743	89	687	1519	31405
2002	0	734	89	708	1531	0	0	0	0	0	0	734	89	708	1531	32935
2003	0	832	175	756	1763	0	0	0	0	0	0	832	175	756	1763	34699
2004	0	825	178	753	1756	0	0	0	0	0	0	825	178	753	1756	36455
2005	0	919	178	781	1877	0	0	0	0	0	0	919	178	781	1877	38332
2006	0	758	178	893	1829	0	0	0	0	0	0	758	178	893	1829	40162
2007	0	764	178	722	1663	0	0	0	0	0	0	764	178	722	1663	41825
2008	0	754	178	831	1763	0	0	0	0	0	0	754	178	831	1763	43588
2009	0	801	178	615	1594	0	15	0	0	15	0	817	178	615	1609	45197
2010	0	736	178	772	1685	0	30	0	0	30	0	766	178	772	1715	46913
2011	0	780	183	726	1690	0	45	0	0	45	0	825	183	726	1735	48648
2012	0	785	177	548	1510	0	60	0	0	60	0	845	177	548	1570	50218
2013	0	729	170	719	1619	0	99	0	0	99	0	828	170	719	1717	51935
2014	0	758	175	666	1599	0	98	0	0	98	0	856	175	666	1697	53632
2015	0	689	175	673	1536	0	98	0	0	98	0	787	175	673	1634	55266
2016	0	716	175	355	1246	0	122	0	0	122	0	838	175	355	1368	56634
2017	0	687	175	554	1415	0	146	0	0	146	0	833	175	554	1561	58195
2018	0	707	175	351	1233	0	145	0	0	145	0	852	175	351	1378	59573
2019	0	716	175	180	1070	0	145	0	0	145	0	860	175	180	1215	60788
2020	0	674	175	439	1288	0	145	0	0	145	0	819	175	439	1432	62220

N. America

Discharge Year	Firm Reactors					Futura					Firm + Futura					Cum.
	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	
Prior	12956	22698	24194	0	59848	0	0	0	0	0	12956	22698	24194	0	59848	59848
1998	710	888	1521	0	3119	0	0	0	0	0	710	888	1521	0	3119	62967
1999	676	1425	1259	0	3359	0	0	0	0	0	676	1425	1259	0	3359	66327
2000	796	1292	1250	0	3338	0	0	0	0	0	796	1292	1250	0	3338	69665
2001	743	1185	1398	0	3326	0	0	0	0	0	743	1185	1398	0	3326	72991
2002	642	1515	1476	0	3632	0	0	0	0	0	642	1515	1476	0	3632	76623
2003	749	1289	1476	0	3513	0	0	0	0	0	749	1289	1476	0	3513	80137
2004	714	1189	1476	0	3378	0	0	0	0	0	714	1189	1476	0	3378	83515
2005	777	1414	1476	0	3667	0	0	0	0	0	777	1414	1476	0	3667	87182
2006	686	1308	1476	0	3470	0	0	0	0	0	686	1308	1476	0	3470	90652
2007	712	1242	1476	0	3430	0	0	0	0	0	712	1242	1476	0	3430	94081
2008	628	1429	1476	0	3533	0	0	0	0	0	628	1429	1476	0	3533	97614
2009	780	1306	1476	0	3563	0	0	0	0	0	780	1306	1476	0	3563	101177
2010	813	1209	1476	0	3498	0	0	0	0	0	813	1209	1476	0	3498	104675
2011	597	1390	1542	0	3529	0	0	0	0	0	597	1390	1542	0	3529	108204
2012	841	1451	1397	0	3688	0	0	0	0	0	841	1451	1397	0	3688	111892
2013	795	1468	1340	0	3603	0	0	0	0	0	795	1468	1340	0	3603	115496
2014	1103	1491	1251	0	3846	0	0	0	0	0	1103	1491	1251	0	3846	119341
2015	417	1323	1251	0	2991	0	0	0	0	0	417	1323	1251	0	2991	122332
2016	593	1071	1251	0	2914	0	0	0	0	0	593	1071	1251	0	2914	125247
2017	362	1025	1251	0	2638	0	0	0	0	0	362	1025	1251	0	2638	127884
2018	436	949	1251	0	2636	0	0	0	0	0	436	949	1251	0	2636	130520
2019	388	599	1251	0	2238	0	0	0	0	0	388	599	1251	0	2238	132758
2020	318	1021	1251	0	2590	0	0	0	0	0	318	1021	1251	0	2590	135348

SUMMARY DISCHARGE URANIUM REPORT BY REACTOR TYPE
(MTU)
Argentina

Discharge Year	Firm Reactors					Futura					Firm + Futura					Cum.
	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	
Prior	0	0	1021	928	1950	0	0	0	0	0	0	0	1021	928	1950	1950
1998	0	0	86	33	119	0	0	0	0	0	0	0	86	33	119	2068
1999	0	0	75	33	108	0	0	0	0	0	0	0	75	33	108	2176
2000	0	0	84	30	114	0	0	0	0	0	0	0	84	30	114	2291
2001	0	0	81	30	111	0	0	0	0	0	0	0	81	30	111	2401
2002	0	0	81	30	111	0	0	0	0	0	0	0	81	30	111	2512
2003	0	0	81	30	111	0	0	0	0	0	0	0	81	30	111	2622
2004	0	0	81	127	208	0	0	0	0	0	0	0	81	127	208	2830
2005	0	0	81	127	207	0	0	0	0	0	0	0	81	127	207	3037
2006	0	0	81	127	208	0	0	0	0	0	0	0	81	127	208	3245
2007	0	0	81	127	208	0	0	0	0	0	0	0	81	127	208	3452
2008	0	0	81	127	208	0	0	0	0	0	0	0	81	127	208	3660
2009	0	0	81	127	208	0	0	0	0	0	0	0	81	127	208	3867
2010	0	0	81	127	208	0	0	0	0	0	0	0	81	127	208	4075
2011	0	0	81	97	178	0	0	0	0	0	0	0	81	97	178	4253
2012	0	0	81	97	178	0	0	0	0	0	0	0	81	97	178	4430
2013	0	0	81	97	178	0	0	0	0	0	0	0	81	97	178	4608
2014	0	0	81	97	178	0	0	0	0	0	0	0	81	97	178	4785
2015	0	0	81	97	178	0	0	0	0	0	0	0	81	97	178	4963
2016	0	0	81	97	178	0	0	0	0	0	0	0	81	97	178	5140
2017	0	0	81	97	178	0	0	0	0	0	0	0	81	97	178	5318
2018	0	0	81	97	178	0	0	0	0	0	0	0	81	97	178	5496
2019	0	0	81	97	178	0	0	0	0	0	0	0	81	97	178	5673
2020	0	0	81	97	178	0	0	0	0	0	0	0	81	97	178	5851

Armenia

Discharge Year	Firm Reactors					Futura					Firm + Futura					Cum.
	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	
Prior	0	354	0	0	354	0	0	0	0	0	0	354	0	0	354	354
1998	0	10	0	0	10	0	0	0	0	0	0	10	0	0	10	365
1999	0	12	0	0	12	0	0	0	0	0	0	12	0	0	12	376
2000	0	12	0	0	12	0	0	0	0	0	0	12	0	0	12	388
2001	0	12	0	0	12	0	0	0	0	0	0	12	0	0	12	399
2002	0	12	0	0	12	0	0	0	0	0	0	12	0	0	12	411
2003	0	12	0	0	12	0	0	0	0	0	0	12	0	0	12	423
2004	0	12	0	0	12	0	0	0	0	0	0	12	0	0	12	434
2005	0	12	0	0	12	0	0	0	0	0	0	12	0	0	12	446
2006	0	12	0	0	12	0	0	0	0	0	0	12	0	0	12	457
2007	0	12	0	0	12	0	0	0	0	0	0	12	0	0	12	469
2008	0	12	0	0	12	0	0	0	0	0	0	12	0	0	12	480
2009	0	41	0	0	41	0	0	0	0	0	0	41	0	0	41	521
2010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	521
2011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	521
2012	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	521
2013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	521
2014	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	521
2015	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	521
2016	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	521
2017	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	521
2018	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	521
2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	521
2020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	521

SUMMARY DISCHARGE URANIUM REPORT BY REACTOR TYPE
 (MTU)
Belgium

Discharge Year	Firm Reactors					Futura					Firm + Futura					Cum.
	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	
Prior	0	1921	0	0	1921	0	0	0	0	0	0	1921	0	0	1921	1921
1998	0	142	0	0	142	0	0	0	0	0	0	142	0	0	142	2063
1999	0	113	0	0	113	0	0	0	0	0	0	113	0	0	113	2177
2000	0	78	0	0	78	0	0	0	0	0	0	78	0	0	78	2255
2001	0	131	0	0	131	0	0	0	0	0	0	131	0	0	131	2386
2002	0	137	0	0	137	0	0	0	0	0	0	137	0	0	137	2523
2003	0	56	0	0	56	0	0	0	0	0	0	56	0	0	56	2578
2004	0	136	0	0	136	0	0	0	0	0	0	136	0	0	136	2715
2005	0	136	0	0	136	0	0	0	0	0	0	136	0	0	136	2851
2006	0	56	0	0	56	0	0	0	0	0	0	56	0	0	56	2907
2007	0	136	0	0	136	0	0	0	0	0	0	136	0	0	136	3043
2008	0	136	0	0	136	0	0	0	0	0	0	136	0	0	136	3180
2009	0	56	0	0	56	0	0	0	0	0	0	56	0	0	56	3235
2010	0	136	0	0	136	0	0	0	0	0	0	136	0	0	136	3372
2011	0	136	0	0	136	0	0	0	0	0	0	136	0	0	136	3508
2012	0	56	0	0	56	0	0	0	0	0	0	56	0	0	56	3563
2013	0	136	0	0	136	0	0	0	0	0	0	136	0	0	136	3700
2014	0	197	0	0	197	0	0	0	0	0	0	197	0	0	197	3897
2015	0	69	0	0	69	0	0	0	0	0	0	69	0	0	69	3966
2016	0	93	0	0	93	0	0	0	0	0	0	93	0	0	93	4059
2017	0	93	0	0	93	0	0	0	0	0	0	93	0	0	93	4152
2018	0	41	0	0	41	0	0	0	0	0	0	41	0	0	41	4192
2019	0	93	0	0	93	0	0	0	0	0	0	93	0	0	93	4285
2020	0	93	0	0	93	0	0	0	0	0	0	93	0	0	93	4378

Brazil

Discharge Year	Firm Reactors					Futura					Firm + Futura					Cum.
	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	
Prior	0	110	0	0	110	0	0	0	0	0	0	110	0	0	110	110
1998	0	46	0	0	46	0	0	0	0	0	0	46	0	0	46	157
1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	157
2000	0	50	0	0	50	0	0	0	0	0	0	50	0	0	50	206
2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	206
2002	0	49	0	0	49	0	0	0	0	0	0	49	0	0	49	255
2003	0	33	0	0	33	0	0	0	0	0	0	33	0	0	33	288
2004	0	15	0	0	15	0	0	0	0	0	0	15	0	0	15	303
2005	0	63	0	0	63	0	0	0	0	0	0	63	0	0	63	366
2006	0	32	0	0	32	0	0	0	0	0	0	32	0	0	32	398
2007	0	15	0	0	15	0	0	0	0	0	0	15	0	0	15	413
2008	0	47	0	0	47	0	0	0	0	0	0	47	0	0	47	461
2009	0	66	0	0	66	0	0	0	0	0	0	66	0	0	66	526
2010	0	15	0	0	15	0	0	0	0	0	0	15	0	0	15	541
2011	0	63	0	0	63	0	0	0	0	0	0	63	0	0	63	604
2012	0	77	0	0	77	0	0	0	0	0	0	77	0	0	77	681
2013	0	15	0	0	15	0	0	0	0	0	0	15	0	0	15	696
2014	0	53	0	0	53	0	0	0	0	0	0	53	0	0	53	749
2015	0	68	0	0	68	0	0	0	0	0	0	68	0	0	68	818
2016	0	15	0	0	15	0	0	0	0	0	0	15	0	0	15	832
2017	0	55	0	0	55	0	0	0	0	0	0	55	0	0	55	888
2018	0	71	0	0	71	0	0	0	0	0	0	71	0	0	71	958
2019	0	15	0	0	15	0	0	0	0	0	0	15	0	0	15	973
2020	0	56	0	0	56	0	0	0	0	0	0	56	0	0	56	1029

SUMMARY DISCHARGE URANIUM REPORT BY REACTOR TYPE
(MTU)
China

Discharge Year	Firm Reactors					Futura					Firm + Futura					Cum.
	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	
Prior	0	195	0	0	195	0	0	0	0	0	0	195	0	0	195	195
1998	0	57	0	0	57	0	0	0	0	0	0	57	0	0	57	252
1999	0	46	0	0	46	0	0	0	0	0	0	46	0	0	46	299
2000	0	58	0	0	58	0	0	0	0	0	0	58	0	0	58	356
2001	0	76	0	0	76	0	0	0	0	0	0	76	0	0	76	432
2002	0	117	0	0	117	0	0	0	0	0	0	117	0	0	117	549
2003	0	117	0	0	117	0	0	0	0	0	0	117	0	0	117	666
2004	0	139	84	0	223	0	0	0	0	0	0	139	84	0	223	889
2005	0	162	168	0	331	0	0	0	0	0	0	162	168	0	331	1220
2006	0	141	168	0	309	0	0	0	0	0	0	141	168	0	309	1529
2007	0	162	168	0	330	0	0	0	0	0	0	162	168	0	330	1859
2008	0	161	168	0	329	0	0	0	0	0	0	161	168	0	329	2188
2009	0	139	168	0	308	0	0	0	0	0	0	139	168	0	308	2496
2010	0	184	168	0	353	0	0	0	0	0	0	184	168	0	353	2849
2011	0	161	168	0	329	0	0	0	0	0	0	161	168	0	329	3178
2012	0	116	168	0	285	0	0	0	0	0	0	116	168	0	285	3463
2013	0	184	168	0	353	0	0	0	0	0	0	184	168	0	353	3815
2014	0	184	168	0	353	0	0	0	0	0	0	184	168	0	353	4168
2015	0	116	168	0	285	0	0	0	0	0	0	116	168	0	285	4452
2016	0	185	168	0	353	0	0	0	0	0	0	185	168	0	353	4806
2017	0	173	168	0	341	0	0	0	0	0	0	173	168	0	341	5147
2018	0	128	168	0	296	0	0	0	0	0	0	128	168	0	296	5443
2019	0	150	168	0	318	0	0	0	0	0	0	150	168	0	318	5761
2020	0	150	168	0	318	0	0	0	0	0	0	150	168	0	318	6079

Czech Republ

Discharge Year	Firm Reactors					Futura					Firm + Futura					Cum.
	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	
Prior	0	515	0	0	515	0	0	0	0	0	0	515	0	0	515	515
1998	0	41	0	0	41	0	0	0	0	0	0	41	0	0	41	556
1999	0	41	0	0	41	0	0	0	0	0	0	41	0	0	41	597
2000	0	41	0	0	41	0	0	0	0	0	0	41	0	0	41	638
2001	0	41	0	0	41	0	0	0	0	0	0	41	0	0	41	679
2002	0	62	0	0	62	0	0	0	0	0	0	62	0	0	62	741
2003	0	82	0	0	82	0	0	0	0	0	0	82	0	0	82	823
2004	0	82	0	0	82	0	0	0	0	0	0	82	0	0	82	904
2005	0	81	0	0	81	0	0	0	0	0	0	81	0	0	81	985
2006	0	79	0	0	79	0	0	0	0	0	0	79	0	0	79	1064
2007	0	76	0	0	76	0	0	0	0	0	0	76	0	0	76	1140
2008	0	68	0	0	68	0	0	0	0	0	0	68	0	0	68	1208
2009	0	68	0	0	68	0	0	0	0	0	0	68	0	0	68	1277
2010	0	68	0	0	68	0	0	0	0	0	0	68	0	0	68	1345
2011	0	67	0	0	67	0	0	0	0	0	0	67	0	0	67	1412
2012	0	66	0	0	66	0	0	0	0	0	0	66	0	0	66	1478
2013	0	66	0	0	66	0	0	0	0	0	0	66	0	0	66	1544
2014	0	66	0	0	66	0	0	0	0	0	0	66	0	0	66	1610
2015	0	66	0	0	66	0	0	0	0	0	0	66	0	0	66	1676
2016	0	65	0	0	65	0	0	0	0	0	0	65	0	0	65	1740
2017	0	64	0	0	64	0	0	0	0	0	0	64	0	0	64	1804
2018	0	64	0	0	64	0	0	0	0	0	0	64	0	0	64	1868
2019	0	64	0	0	64	0	0	0	0	0	0	64	0	0	64	1932
2020	0	64	0	0	64	0	0	0	0	0	0	64	0	0	64	1996

SUMMARY DISCHARGE PLUTONIUM REPORT BY REACTOR TYPE
(KgPuF)
East Europe

Discharge Year	Firm Reactors					Futura					Firm + Futura					Cum.
	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	
Prior	0	58346	265	44617	103228	0	0	0	0	0	0	58346	265	44617	103228	103228
1998	0	4693	273	1910	6876	0	0	0	0	0	0	4693	273	1910	6876	110104
1999	0	4762	273	1932	6967	0	0	0	0	0	0	4762	273	1932	6967	117071
2000	0	4677	273	1922	6871	0	0	0	0	0	0	4677	273	1922	6871	123942
2001	0	5078	273	2195	7546	0	0	0	0	0	0	5078	273	2195	7546	131488
2002	0	4932	273	2299	7504	0	0	0	0	0	0	4932	273	2299	7504	138992
2003	0	5479	537	2473	8490	0	0	0	0	0	0	5479	537	2473	8490	147482
2004	0	5606	545	2444	8596	0	0	0	0	0	0	5606	545	2444	8596	156077
2005	0	6259	545	2547	9352	0	0	0	0	0	0	6259	545	2547	9352	165429
2006	0	5323	545	2804	8673	0	0	0	0	0	0	5323	545	2804	8673	174101
2007	0	5334	545	2360	8240	0	0	0	0	0	0	5334	545	2360	8240	182341
2008	0	5329	545	2601	8475	0	0	0	0	0	0	5329	545	2601	8475	190816
2009	0	5564	545	1991	8101	0	66	0	0	66	0	5631	545	1991	8167	198983
2010	0	5209	545	2402	8156	0	154	0	0	154	0	5363	545	2402	8310	207293
2011	0	5571	563	2269	8403	0	250	0	0	250	0	5821	563	2269	8653	215946
2012	0	5546	543	1817	7907	0	350	0	0	350	0	5896	543	1817	8257	224202
2013	0	5242	536	2259	8038	0	559	0	0	559	0	5801	536	2259	8597	232799
2014	0	5359	566	2073	7998	0	625	0	0	625	0	5985	566	2073	8623	241422
2015	0	4956	566	1985	7507	0	650	0	0	650	0	5606	566	1985	8157	249579
2016	0	5161	566	1148	6875	0	772	0	0	772	0	5933	566	1148	7646	257225
2017	0	4948	566	1575	7089	0	913	0	0	913	0	5861	566	1575	8002	265227
2018	0	5091	566	1069	6726	0	958	0	0	958	0	6049	566	1069	7684	272911
2019	0	5159	566	603	6328	0	977	0	0	977	0	6137	566	603	7305	280216
2020	0	4855	566	1234	6655	0	986	0	0	986	0	5841	566	1234	7641	287857

N. America

Discharge Year	Firm Reactors					Futura					Firm + Futura					Cum.
	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	
Prior	67059	149078	75393	0	291530	0	0	0	0	0	67059	149078	75393	0	291530	291530
1998	4196	6443	4385	0	15025	0	0	0	0	0	4196	6443	4385	0	15025	306555
1999	4005	10341	3997	0	18342	0	0	0	0	0	4005	10341	3997	0	18342	324897
2000	4662	9442	3970	0	18074	0	0	0	0	0	4662	9442	3970	0	18074	342971
2001	4444	8718	4439	0	17600	0	0	0	0	0	4444	8718	4439	0	17600	360572
2002	3868	11232	4686	0	19787	0	0	0	0	0	3868	11232	4686	0	19787	380359
2003	4572	9536	4686	0	18795	0	0	0	0	0	4572	9536	4686	0	18795	399154
2004	4392	8859	4686	0	17937	0	0	0	0	0	4392	8859	4686	0	17937	417091
2005	4604	10514	4686	0	19804	0	0	0	0	0	4604	10514	4686	0	19804	436895
2006	4283	9713	4686	0	18682	0	0	0	0	0	4283	9713	4686	0	18682	455577
2007	4412	9180	4686	0	18278	0	0	0	0	0	4412	9180	4686	0	18278	473855
2008	3926	10652	4686	0	19264	0	0	0	0	0	3926	10652	4686	0	19264	493119
2009	4767	9690	4686	0	19143	0	0	0	0	0	4767	9690	4686	0	19143	512262
2010	4874	8991	4686	0	18551	0	0	0	0	0	4874	8991	4686	0	18551	530813
2011	3705	10250	4815	0	18770	0	0	0	0	0	3705	10250	4815	0	18770	549584
2012	5034	10620	4394	0	20048	0	0	0	0	0	5034	10620	4394	0	20048	569632
2013	4725	10482	4215	0	19421	0	0	0	0	0	4725	10482	4215	0	19421	589053
2014	6207	10653	3972	0	20832	0	0	0	0	0	6207	10653	3972	0	20832	609885
2015	2599	9615	3972	0	16186	0	0	0	0	0	2599	9615	3972	0	16186	626071
2016	3590	7521	3972	0	15084	0	0	0	0	0	3590	7521	3972	0	15084	641154
2017	2241	7477	3972	0	13691	0	0	0	0	0	2241	7477	3972	0	13691	654845
2018	2643	6971	3972	0	13586	0	0	0	0	0	2643	6971	3972	0	13586	668430
2019	2417	4401	3972	0	10790	0	0	0	0	0	2417	4401	3972	0	10790	679220
2020	1974	7354	3972	0	13300	0	0	0	0	0	1974	7354	3972	0	13300	692521

SUMMARY DISCHARGE PLUTONIUM REPORT BY REACTOR TYPE
(KgPuF)
Argentina

Discharge Year	Firm Reactors					Futura					Firm + Futura					Cum.
	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	
Prior	0	0	3230	2592	5822	0	0	0	0	0	0	0	3230	2592	5822	5822
1998	0	0	272	106	377	0	0	0	0	0	0	0	272	106	377	6199
1999	0	0	238	115	353	0	0	0	0	0	0	0	238	115	353	6552
2000	0	0	268	107	375	0	0	0	0	0	0	0	268	107	375	6927
2001	0	0	256	107	363	0	0	0	0	0	0	0	256	107	363	7290
2002	0	0	256	107	363	0	0	0	0	0	0	0	256	107	363	7653
2003	0	0	256	107	363	0	0	0	0	0	0	0	256	107	363	8016
2004	0	0	256	389	645	0	0	0	0	0	0	0	256	389	645	8661
2005	0	0	256	391	647	0	0	0	0	0	0	0	256	391	647	9308
2006	0	0	256	402	658	0	0	0	0	0	0	0	256	402	658	9966
2007	0	0	256	402	658	0	0	0	0	0	0	0	256	402	658	10624
2008	0	0	256	402	658	0	0	0	0	0	0	0	256	402	658	11282
2009	0	0	256	402	658	0	0	0	0	0	0	0	256	402	658	11940
2010	0	0	256	404	660	0	0	0	0	0	0	0	256	404	660	12600
2011	0	0	256	295	551	0	0	0	0	0	0	0	256	295	551	13151
2012	0	0	256	295	551	0	0	0	0	0	0	0	256	295	551	13703
2013	0	0	256	295	551	0	0	0	0	0	0	0	256	295	551	14254
2014	0	0	256	295	551	0	0	0	0	0	0	0	256	295	551	14805
2015	0	0	256	295	551	0	0	0	0	0	0	0	256	295	551	15357
2016	0	0	256	295	551	0	0	0	0	0	0	0	256	295	551	15908
2017	0	0	256	295	551	0	0	0	0	0	0	0	256	295	551	16460
2018	0	0	256	295	551	0	0	0	0	0	0	0	256	295	551	17011
2019	0	0	256	295	551	0	0	0	0	0	0	0	256	295	551	17562
2020	0	0	256	295	551	0	0	0	0	0	0	0	256	295	551	18114

Armenia

Discharge Year	Firm Reactors					Futura					Firm + Futura					Cum.
	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	
Prior	0	1967	0	0	1967	0	0	0	0	0	0	1967	0	0	1967	1967
1998	0	57	0	0	57	0	0	0	0	0	0	57	0	0	57	2024
1999	0	75	0	0	75	0	0	0	0	0	0	75	0	0	75	2098
2000	0	75	0	0	75	0	0	0	0	0	0	75	0	0	75	2174
2001	0	75	0	0	75	0	0	0	0	0	0	75	0	0	75	2248
2002	0	75	0	0	75	0	0	0	0	0	0	75	0	0	75	2323
2003	0	75	0	0	75	0	0	0	0	0	0	75	0	0	75	2398
2004	0	75	0	0	75	0	0	0	0	0	0	75	0	0	75	2473
2005	0	75	0	0	75	0	0	0	0	0	0	75	0	0	75	2548
2006	0	75	0	0	75	0	0	0	0	0	0	75	0	0	75	2623
2007	0	75	0	0	75	0	0	0	0	0	0	75	0	0	75	2698
2008	0	75	0	0	75	0	0	0	0	0	0	75	0	0	75	2773
2009	0	209	0	0	209	0	0	0	0	0	0	209	0	0	209	2981
2010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2981
2011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2981
2012	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2981
2013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2981
2014	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2981
2015	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2981
2016	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2981
2017	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2981
2018	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2981
2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2981
2020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2981

SUMMARY DISCHARGE PLUTONIUM REPORT BY REACTOR TYPE
 (KgPuF)
 Belgium

Discharge Year	Firm Reactors					Futura					Firm + Futura					Cum.
	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	
Prior	0	12930	0	0	12930	0	0	0	0	0	0	12930	0	0	12930	12930
1998	0	1061	0	0	1061	0	0	0	0	0	0	1061	0	0	1061	13992
1999	0	851	0	0	851	0	0	0	0	0	0	851	0	0	851	14843
2000	0	623	0	0	623	0	0	0	0	0	0	623	0	0	623	15466
2001	0	969	0	0	969	0	0	0	0	0	0	969	0	0	969	16435
2002	0	1032	0	0	1032	0	0	0	0	0	0	1032	0	0	1032	17468
2003	0	429	0	0	429	0	0	0	0	0	0	429	0	0	429	17896
2004	0	1042	0	0	1042	0	0	0	0	0	0	1042	0	0	1042	18939
2005	0	1037	0	0	1037	0	0	0	0	0	0	1037	0	0	1037	19976
2006	0	431	0	0	431	0	0	0	0	0	0	431	0	0	431	20407
2007	0	1024	0	0	1024	0	0	0	0	0	0	1024	0	0	1024	21431
2008	0	996	0	0	996	0	0	0	0	0	0	996	0	0	996	22427
2009	0	403	0	0	403	0	0	0	0	0	0	403	0	0	403	22830
2010	0	996	0	0	996	0	0	0	0	0	0	996	0	0	996	23826
2011	0	996	0	0	996	0	0	0	0	0	0	996	0	0	996	24823
2012	0	403	0	0	403	0	0	0	0	0	0	403	0	0	403	25226
2013	0	996	0	0	996	0	0	0	0	0	0	996	0	0	996	26222
2014	0	1401	0	0	1401	0	0	0	0	0	0	1401	0	0	1401	27623
2015	0	513	0	0	513	0	0	0	0	0	0	513	0	0	513	28136
2016	0	675	0	0	675	0	0	0	0	0	0	675	0	0	675	28811
2017	0	675	0	0	675	0	0	0	0	0	0	675	0	0	675	29487
2018	0	295	0	0	295	0	0	0	0	0	0	295	0	0	295	29782
2019	0	675	0	0	675	0	0	0	0	0	0	675	0	0	675	30457
2020	0	675	0	0	675	0	0	0	0	0	0	675	0	0	675	31133

Brazil

Discharge Year	Firm Reactors					Futura					Firm + Futura					Cum.
	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	
Prior	0	598	0	0	598	0	0	0	0	0	0	598	0	0	598	598
1998	0	236	0	0	236	0	0	0	0	0	0	236	0	0	236	833
1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	833
2000	0	214	0	0	214	0	0	0	0	0	0	214	0	0	214	1047
2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1047
2002	0	284	0	0	284	0	0	0	0	0	0	284	0	0	284	1331
2003	0	213	0	0	213	0	0	0	0	0	0	213	0	0	213	1544
2004	0	103	0	0	103	0	0	0	0	0	0	103	0	0	103	1647
2005	0	430	0	0	430	0	0	0	0	0	0	430	0	0	430	2077
2006	0	225	0	0	225	0	0	0	0	0	0	225	0	0	225	2302
2007	0	99	0	0	99	0	0	0	0	0	0	99	0	0	99	2400
2008	0	324	0	0	324	0	0	0	0	0	0	324	0	0	324	2724
2009	0	397	0	0	397	0	0	0	0	0	0	397	0	0	397	3121
2010	0	104	0	0	104	0	0	0	0	0	0	104	0	0	104	3225
2011	0	419	0	0	419	0	0	0	0	0	0	419	0	0	419	3644
2012	0	538	0	0	538	0	0	0	0	0	0	538	0	0	538	4182
2013	0	104	0	0	104	0	0	0	0	0	0	104	0	0	104	4286
2014	0	372	0	0	372	0	0	0	0	0	0	372	0	0	372	4659
2015	0	484	0	0	484	0	0	0	0	0	0	484	0	0	484	5143
2016	0	104	0	0	104	0	0	0	0	0	0	104	0	0	104	5247
2017	0	397	0	0	397	0	0	0	0	0	0	397	0	0	397	5644
2018	0	505	0	0	505	0	0	0	0	0	0	505	0	0	505	6149
2019	0	104	0	0	104	0	0	0	0	0	0	104	0	0	104	6254
2020	0	402	0	0	402	0	0	0	0	0	0	402	0	0	402	6655

SUMMARY DISCHARGE PLUTONIUM REPORT BY REACTOR TYPE
 (KgPuF)
 China

Discharge Year	Firm Reactors					Futura					Firm + Futura					Cum.
	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	
Prior	0	1081	0	0	1081	0	0	0	0	0	0	1081	0	0	1081	1081
1998	0	367	0	0	367	0	0	0	0	0	0	367	0	0	367	1448
1999	0	281	0	0	281	0	0	0	0	0	0	281	0	0	281	1729
2000	0	360	0	0	360	0	0	0	0	0	0	360	0	0	360	2089
2001	0	427	0	0	427	0	0	0	0	0	0	427	0	0	427	2516
2002	0	624	0	0	624	0	0	0	0	0	0	624	0	0	624	3140
2003	0	644	0	0	644	0	0	0	0	0	0	644	0	0	644	3784
2004	0	875	267	0	1142	0	0	0	0	0	0	875	267	0	1142	4926
2005	0	1022	535	0	1556	0	0	0	0	0	0	1022	535	0	1556	6483
2006	0	857	535	0	1392	0	0	0	0	0	0	857	535	0	1392	7874
2007	0	1078	535	0	1612	0	0	0	0	0	0	1078	535	0	1612	9486
2008	0	1083	535	0	1617	0	0	0	0	0	0	1083	535	0	1617	11104
2009	0	906	535	0	1441	0	0	0	0	0	0	906	535	0	1441	12545
2010	0	1262	535	0	1797	0	0	0	0	0	0	1262	535	0	1797	14342
2011	0	1095	535	0	1630	0	0	0	0	0	0	1095	535	0	1630	15971
2012	0	752	535	0	1287	0	0	0	0	0	0	752	535	0	1287	17258
2013	0	1263	535	0	1797	0	0	0	0	0	0	1263	535	0	1797	19055
2014	0	1263	535	0	1797	0	0	0	0	0	0	1263	535	0	1797	20853
2015	0	752	535	0	1287	0	0	0	0	0	0	752	535	0	1287	22139
2016	0	1183	535	0	1718	0	0	0	0	0	0	1183	535	0	1718	23857
2017	0	1197	535	0	1731	0	0	0	0	0	0	1197	535	0	1731	25589
2018	0	853	535	0	1388	0	0	0	0	0	0	853	535	0	1388	26977
2019	0	1030	535	0	1564	0	0	0	0	0	0	1030	535	0	1564	28541
2020	0	1030	535	0	1564	0	0	0	0	0	0	1030	535	0	1564	30105

Czech Republ

Discharge Year	Firm Reactors					Futura					Firm + Futura					Cum.
	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	BWR	PWR	CANDU	Other	Total	
Prior	0	3238	0	0	3238	0	0	0	0	0	0	3238	0	0	3238	3238
1998	0	283	0	0	283	0	0	0	0	0	0	283	0	0	283	3521
1999	0	284	0	0	284	0	0	0	0	0	0	284	0	0	284	3805
2000	0	284	0	0	284	0	0	0	0	0	0	284	0	0	284	4088
2001	0	283	0	0	283	0	0	0	0	0	0	283	0	0	283	4371
2002	0	348	0	0	348	0	0	0	0	0	0	348	0	0	348	4720
2003	0	440	0	0	440	0	0	0	0	0	0	440	0	0	440	5160
2004	0	488	0	0	488	0	0	0	0	0	0	488	0	0	488	5648
2005	0	531	0	0	531	0	0	0	0	0	0	531	0	0	531	6179
2006	0	546	0	0	546	0	0	0	0	0	0	546	0	0	546	6725
2007	0	546	0	0	546	0	0	0	0	0	0	546	0	0	546	7272
2008	0	486	0	0	486	0	0	0	0	0	0	486	0	0	486	7758
2009	0	486	0	0	486	0	0	0	0	0	0	486	0	0	486	8244
2010	0	490	0	0	490	0	0	0	0	0	0	490	0	0	490	8733
2011	0	488	0	0	488	0	0	0	0	0	0	488	0	0	488	9221
2012	0	480	0	0	480	0	0	0	0	0	0	480	0	0	480	9701
2013	0	487	0	0	487	0	0	0	0	0	0	487	0	0	487	10188
2014	0	488	0	0	488	0	0	0	0	0	0	488	0	0	488	10677
2015	0	491	0	0	491	0	0	0	0	0	0	491	0	0	491	11168
2016	0	485	0	0	485	0	0	0	0	0	0	485	0	0	485	11653
2017	0	480	0	0	480	0	0	0	0	0	0	480	0	0	480	12133
2018	0	481	0	0	481	0	0	0	0	0	0	481	0	0	481	12613
2019	0	481	0	0	481	0	0	0	0	0	0	481	0	0	481	13095
2020	0	477	0	0	477	0	0	0	0	0	0	477	0	0	477	13571

DETAIL DISCHARGE REPORT BY COUNTRY/UTILITY/REACTOR
Firm Reactors
Argentina

Utility	----- Reactor -----		Discharge Date	Disch Asbl	U-235 Burnup	Enr	-----MTU-----		-----KgPuF-----		-----KgPuT-----		
	Name	Type					Cycle	Total	Cum.	Total	Cum.	Total	Cum.
NASA	Atucha 1	PHWR	1	12/31/1974	253	4660	.35	38.3	38.3	98	98	119	119
			2	12/31/1975	253	5740	.30	38.2	76.5	107	205	136	256
			3	12/31/1976	253	5930	.30	38.2	114.7	109	313	139	395
			4	12/31/1977	253	5370	.32	38.2	152.9	104	417	131	525
			5	12/31/1978	253	5470	.32	38.2	191.2	105	522	132	658
			6	12/31/1979	253	5600	.31	38.2	229.4	106	628	134	792
			7	12/31/1980	253	5870	.30	38.2	267.6	108	737	138	930
			8	12/31/1981	253	5680	.31	38.2	305.8	107	843	135	1065
			9	12/31/1982	253	5650	.31	38.2	344.0	106	950	135	1200
			10	12/31/1983	253	5650	.31	38.2	382.2	106	1056	135	1335
			11	12/31/1984	253	6070	.29	38.2	420.4	110	1166	141	1476
			12	12/31/1985	253	6750	.26	38.2	458.6	115	1281	151	1628
			13	12/31/1986	253	6750	.26	38.2	496.7	115	1396	151	1779
			14	12/31/1987	253	6750	.26	38.2	534.9	115	1511	151	1930
			15	12/31/1988	253	6750	.26	38.2	573.1	115	1626	151	2082
			16	12/31/1989	253	0	.71	38.6	611.7	0	1626	0	2082
			17	12/31/1990	253	5706	.31	38.2	649.9	107	1733	135	2217
			18	12/31/1991	253	6198	.30	38.2	688.1	109	1842	141	2358
			19	12/31/1992	253	5943	.31	38.2	726.3	108	1950	138	2497
			20	12/31/1993	253	8950	.19	38.0	764.3	128	2078	179	2676
			21	12/31/1994	253	9405	.17	38.0	802.3	130	2208	185	2860
			22	12/31/1995	253	9956	.16	38.0	840.3	132	2340	191	3051
			23	12/31/1996	253	5650	.31	38.2	878.5	106	2447	135	3186
			24	12/31/1997	330	6486	.31	49.8	928.3	145	2592	188	3374
			25	12/31/1998	220	8366	.25	33.1	961.4	106	2697	144	3518
			26	12/31/1999	220	10255	.20	33.0	994.4	115	2812	164	3682
			27	12/31/2000	200	11311	.19	30.0	1024.4	107	2919	156	3838
			28	12/31/2001	200	11280	.19	30.0	1054.4	107	3026	156	3994
			29	12/31/2002	200	11280	.19	30.0	1084.4	107	3133	156	4149
			30	12/31/2003	200	11280	.19	30.0	1114.3	107	3240	156	4305
			31	12/31/2004	200	10020	.22	30.0	1144.4	103	3343	146	4451
			32	12/31/2005	197	11280	.19	29.5	1173.9	105	3449	153	4604
			33	12/31/2006	200	11283	.19	30.0	1203.9	107	3555	155	4759
			34	12/31/2007	200	11280	.19	30.0	1233.9	107	3662	155	4915
			35	12/31/2008	200	11311	.19	30.0	1263.8	107	3769	155	5070
			36	12/31/2009	200	11281	.19	30.0	1293.8	107	3876	155	5225
			37	12/31/2010	203	11278	.19	30.4	1324.3	108	3984	158	5383
	Atucha 2	PHWR	1	12/31/2004	520	6400	.28	97.0	97.0	285	285	371	371
			2	12/31/2005	520	6400	.28	97.0	193.9	285	571	371	743
			3	12/31/2006	520	6900	.25	96.9	290.8	295	866	390	1133
			4	12/31/2007	520	6900	.25	96.9	387.7	295	1161	390	1523
			5	12/31/2008	520	6900	.25	96.9	484.6	295	1457	390	1914
			6	12/31/2009	520	6900	.25	96.9	581.5	295	1752	390	2304
			7	12/31/2010	520	6900	.25	96.9	678.4	295	2047	390	2695
			8	12/31/2011	520	6900	.25	96.9	775.3	295	2343	390	3085
			9	12/31/2012	520	6900	.25	96.9	872.2	295	2638	390	3475
			10	12/31/2013	520	6900	.25	96.9	969.1	295	2933	390	3866
			11	12/31/2014	520	6900	.25	96.9	1066.0	295	3229	390	4256
			12	12/31/2015	520	6900	.25	96.9	1162.9	295	3524	390	4647
			13	12/31/2016	520	6900	.25	96.9	1259.8	295	3819	390	5037
			14	12/31/2017	520	6900	.25	96.9	1356.7	295	4115	390	5427
			15	12/31/2018	520	6900	.25	96.9	1453.6	295	4410	390	5818
			16	12/31/2019	520	6900	.25	96.9	1550.5	295	4705	390	6208
			17	12/31/2020	520	6900	.25	96.9	1647.4	295	5001	390	6599
	Embalse	CANDU	1	12/31/1984	1842	5714	.30	33.7	33.7	94	94	120	120
			2	12/31/1985	4014	7500	.23	73.9	107.7	235	329	316	436
			3	12/31/1986	4014	7500	.23	75.3	182.9	239	568	321	757
			4	12/31/1987	4014	7500	.23	75.3	258.2	239	807	321	1078
			5	12/31/1988	4014	7500	.23	75.3	333.5	239	1046	321	1400
			6	12/31/1989	4014	7500	.23	75.3	408.8	239	1285	321	1721
			7	12/31/1990	4014	7500	.23	75.3	484.1	239	1524	321	2043
			8	12/31/1991	4014	7500	.23	75.3	559.3	239	1763	321	2364
			9	12/31/1992	4014	7500	.23	75.3	634.6	239	2002	321	2686
			10	12/31/1993	4014	7500	.23	75.3	709.9	239	2241	321	3007

DETAIL DISCHARGE REPORT BY COUNTRY/UTILITY/REACTOR
 Firm Reactors
Argentina

Utility	----- Reactor -----		Discharge Date	Disch Asbl	Burnup	U-235 Enr	-----MTU-----		-----KgPuF-----		-----KgPuT-----		
	Name	Type					Total	Cum.	Total	Cum.	Total	Cum.	
NASA	Embalse	CANDU	11	12/31/1994	4014	7500	.23	75.3	785.2	239	2480	321	3328
			12	12/31/1995	4014	7500	.23	75.3	860.5	239	2719	321	3650
			13	12/31/1996	4014	7500	.23	75.3	935.7	239	2959	321	3971
			14	12/31/1997	4560	7500	.23	85.5	1021.3	272	3230	365	4336
			15	12/31/1998	4560	7500	.23	85.5	1106.8	272	3502	365	4702
			16	12/31/1999	4000	7500	.23	75.0	1181.8	238	3740	320	5022
			17	12/31/2000	4500	7500	.23	84.4	1266.2	268	4008	360	5382
			18	12/31/2001	4300	7500	.23	80.6	1346.8	256	4264	344	5727
			19	12/31/2002	4300	7500	.23	80.6	1427.5	256	4520	344	6071
			20	12/31/2003	4300	7500	.23	80.6	1508.1	256	4776	344	6415
			21	12/31/2004	4300	7500	.23	80.6	1588.8	256	5032	344	6760
			22	12/31/2005	4300	7500	.23	80.6	1669.4	256	5288	344	7104
			23	12/31/2006	4300	7500	.23	80.6	1750.0	256	5544	344	7448
			24	12/31/2007	4300	7500	.23	80.6	1830.7	256	5800	344	7792
			25	12/31/2008	4300	7500	.23	80.6	1911.3	256	6056	344	8137
			26	12/31/2009	4300	7500	.23	80.6	1992.0	256	6312	344	8481
			27	12/31/2010	4300	7500	.23	80.6	2072.6	256	6568	344	8825
			28	12/31/2011	4300	7500	.23	80.6	2153.3	256	6825	344	9170
			29	12/31/2012	4300	7500	.23	80.6	2233.9	256	7081	344	9514
			30	12/31/2013	4300	7500	.23	80.6	2314.5	256	7337	344	9858
			31	12/31/2014	4300	7500	.23	80.6	2395.2	256	7593	344	10203
			32	12/31/2015	4300	7500	.23	80.6	2475.8	256	7849	344	10547
			33	12/31/2016	4300	7500	.23	80.6	2556.5	256	8105	344	10891
			34	12/31/2017	4300	7500	.23	80.6	2637.1	256	8361	344	11236
			35	12/31/2018	4300	7500	.23	80.6	2717.8	256	8617	344	11580
			36	12/31/2019	4300	7500	.23	80.6	2798.4	256	8873	344	11924
			37	12/31/2020	4300	7500	.23	80.6	2879.0	256	9129	344	12269

DETAIL DISCHARGE REPORT BY COUNTRY/UTILITY/REACTOR
Firm Reactors
Brazil

Utility	----- Reactor -----		Discharge Date	Disch Asbl	Burnup	U-235 Enr	-----MTU-----		-----KgPuF-----		-----KgPuT-----		
	Name	Type					Cycle	Total	Cum.	Total	Cum.	Total	Cum.
Eletronuc	Angra 1	PWR	1	04/16/1983	4	497	2.54	1.6	1.6	0	0	0	0
			2	01/03/1986	4	13976	.99	1.6	3.2	8	8	10	10
			3	10/01/1989	32	23269	.89	12.6	15.9	74	82	100	110
			4	08/01/1991	40	33553	.74	15.6	31.5	104	187	150	260
			5	03/05/1993	84	20330	1.62	32.0	63.5	176	362	224	484
			6	03/16/1996	81	19637	1.25	31.5	95.0	167	529	220	704
			7	09/08/1997	40	11937	.95	15.4	110.5	68	598	86	790
			8	10/17/1998	121	18847	1.72	46.2	156.7	236	833	300	1090
			9	12/31/2000	40	14615	.95	16.0	172.7	78	911	99	1189
			10	07/31/2002	40	29274	.62	15.7	188.3	98	1009	141	1330
			11	02/29/2004	40	44091	.44	14.8	203.2	103	1112	160	1490
			12	09/30/2005	81	37265	.80	30.3	233.5	206	1318	299	1789
			13	04/30/2007	40	29643	1.09	15.1	248.5	99	1417	135	1924
			14	11/30/2008	40	29695	1.09	15.1	263.6	99	1515	135	2059
			15	06/30/2010	40	44491	.51	14.8	278.4	104	1620	160	2219
			16	01/31/2012	40	44886	.51	14.8	293.2	104	1724	161	2380
			17	08/31/2013	40	44837	.51	14.8	308.0	104	1828	161	2541
			18	03/31/2015	40	44835	.51	14.8	322.8	104	1933	161	2701
			19	10/31/2016	40	44887	.51	14.8	337.6	104	2037	161	2862
			20	05/31/2018	40	44836	.51	14.8	352.5	104	2141	161	3023
			21	12/31/2019	40	44860	.51	14.8	367.3	104	2246	161	3184
	Angra 2	PWR	1	12/31/2000	64	10000	1.06	33.6	33.6	136	136	167	167
			2	06/30/2002	64	20000	.92	33.2	66.8	186	322	244	412
			3	12/29/2003	64	30000	.89	32.8	99.6	213	534	296	708
			4	06/28/2005	64	38089	.73	32.5	132.1	224	759	328	1036
			5	12/27/2006	64	39330	.68	32.4	164.5	225	984	332	1369
			6	06/26/2008	64	39346	.68	32.4	196.9	225	1209	332	1701
			7	12/25/2009	64	39346	.68	32.4	229.3	225	1434	332	2034
			8	06/25/2011	64	39346	.68	32.4	261.7	225	1659	332	2366
			9	12/23/2012	64	39346	.68	32.4	294.2	225	1884	332	2699
			10	06/23/2014	64	39346	.68	32.4	326.6	225	2109	332	3031
			11	12/22/2015	64	39346	.68	32.4	359.0	225	2334	332	3364
			12	06/21/2017	64	39346	.68	32.4	391.4	225	2558	332	3696
			13	12/20/2018	64	39346	.68	32.4	423.8	225	2783	332	4029
			14	06/19/2020	64	39346	.68	32.4	456.2	225	3008	332	4361
	Angra 3	PWR	1	06/30/2009	64	16880	.71	33.3	33.3	172	172	228	228
			2	01/15/2011	60	30971	.49	30.7	64.0	194	366	285	513
			3	07/15/2012	60	49229	.29	30.0	94.0	209	574	338	852
			4	01/15/2014	60	57239	.30	20.4	114.4	148	722	244	1096
			5	07/15/2015	60	62417	.26	21.3	135.7	155	876	263	1359
			6	01/15/2017	60	64915	.33	23.1	158.8	172	1049	289	1649
			7	07/15/2018	60	64147	.36	23.4	182.2	176	1225	293	1941
			8	01/15/2020	60	63265	.38	23.4	205.6	177	1401	292	2233

DETAIL DISCHARGE REPORT BY COUNTRY/UTILITY/REACTOR
Firm Reactors
Czech Republ

Utility	----- Reactor -----			Discharge Date	Disch Asbl	Burnup	U-235 Enr	-----MTU-----		-----KgPuF-----		-----KgPuT-----	
	Name	Type	Cycle					Total	Cum.	Total	Cum.	Total	Cum.
CEZ	Dukovany 1	PWR	1	04/19/1986	114	10948	.77	13.4	13.4	58	58	73	73
			2	05/02/1987	114	22737	.77	13.2	26.6	77	134	104	177
			3	05/07/1988	121	29731	1.10	13.9	40.4	91	225	124	301
			4	05/27/1989	102	28553	1.05	11.7	52.1	75	300	103	404
			5	05/25/1990	114	28861	1.00	13.1	65.2	84	384	116	520
			6	05/18/1991	107	28721	.97	12.3	77.5	79	463	108	628
			7	07/04/1992	102	31810	.99	11.7	89.2	78	540	108	736
			8	07/05/1993	102	31826	.95	11.7	100.8	77	618	108	845
			9	06/24/1994	102	33135	.93	11.6	112.5	78	696	110	955
			10	06/17/1995	96	33660	.85	10.9	123.4	74	770	105	1059
			11	07/05/1996	92	34598	.90	10.5	133.9	71	841	101	1160
			12	06/28/1997	90	33687	.84	10.3	144.1	69	910	98	1259
			13	06/30/1998	90	34946	.96	10.2	154.4	71	981	100	1358
			14	06/30/1999	91	35000	.96	10.3	164.7	71	1052	101	1459
			15	06/30/2000	90	35000	.96	10.2	175.0	71	1123	100	1559
			16	06/30/2001	90	35000	.89	10.2	185.2	70	1193	100	1658
			17	06/30/2002	91	40174	.77	10.3	195.5	73	1266	107	1765
			18	06/30/2003	90	40229	.78	10.2	205.7	72	1338	105	1870
			19	06/30/2004	90	40229	.78	10.2	215.9	72	1410	105	1976
			20	06/30/2005	91	40174	.77	10.3	226.1	73	1482	107	2082
			21	06/30/2006	90	40229	.78	10.2	236.3	72	1554	105	2188
			22	06/30/2007	90	40616	.81	10.2	246.5	73	1627	106	2294
			23	06/30/2008	73	39968	.76	8.2	254.8	58	1685	85	2379
			24	06/30/2009	72	40035	.76	8.1	262.9	57	1742	84	2463
			25	06/30/2010	72	40519	.80	8.2	271.1	58	1800	85	2548
			26	06/30/2011	72	40519	.80	8.2	279.2	58	1858	85	2633
			27	06/30/2012	73	40484	.75	8.2	287.5	58	1916	86	2718
			28	06/30/2013	72	43874	.79	8.1	295.5	59	1975	87	2806
			29	06/30/2014	72	44439	.84	8.1	303.7	60	2034	88	2894
			30	06/30/2015	72	44439	.84	8.1	311.8	60	2094	88	2982
			31	06/30/2016	73	43796	.78	8.2	320.0	60	2154	88	3070
			32	06/30/2017	72	43874	.79	8.1	328.1	59	2213	87	3157
			33	06/30/2018	72	44439	.84	8.1	336.2	60	2272	88	3245
			34	06/30/2019	72	44439	.84	8.1	344.3	60	2332	88	3334
			35	06/30/2020	73	43796	.78	8.2	352.5	60	2392	88	3422
	Dukovany 2	PWR	1	02/28/1987	114	10977	.77	13.4	13.4	58	58	73	73
			2	02/20/1988	114	22253	.79	13.2	26.6	76	134	103	176
			3	03/04/1989	121	29731	1.10	13.9	40.4	91	225	124	300
			4	02/16/1990	114	28398	1.05	13.1	53.5	84	308	115	415
			5	03/08/1991	108	28319	1.06	12.4	65.9	79	388	108	523
			6	03/21/1992	109	29750	.93	12.5	78.4	81	468	112	636
			7	05/08/1993	102	32117	.97	11.7	90.1	78	546	108	744
			8	04/23/1994	90	32959	.92	10.3	100.4	69	615	97	841
			9	05/29/1995	90	33433	.90	10.3	110.6	69	684	98	939
			10	04/27/1996	102	34789	.90	11.6	122.2	79	764	112	1051
			11	05/17/1997	90	34358	.90	10.2	132.5	70	834	99	1150
			12	04/30/1998	91	35961	.92	10.3	142.8	72	905	102	1252
			13	04/30/1999	90	35000	.96	10.2	153.1	71	976	100	1352
			14	04/30/2000	90	35000	.96	10.2	163.3	71	1047	100	1451
			15	04/30/2001	91	35000	.88	10.3	173.6	71	1117	101	1552
			16	04/30/2002	90	40229	.78	10.2	183.8	72	1189	105	1658
			17	04/30/2003	90	40229	.78	10.2	194.0	72	1261	105	1763
			18	04/30/2004	90	40229	.78	10.2	204.2	72	1333	105	1868
			19	04/30/2005	91	40174	.77	10.3	214.5	73	1406	107	1975
			20	04/30/2006	90	40229	.78	10.2	224.6	72	1478	105	2080
			21	04/30/2007	90	40616	.81	10.2	234.8	73	1550	106	2187
			22	04/30/2008	72	40035	.76	8.1	243.0	57	1607	84	2271
			23	04/30/2009	73	39968	.76	8.2	251.2	58	1665	85	2356
			24	04/30/2010	72	40519	.80	8.2	259.4	58	1723	85	2441
			25	04/30/2011	72	40519	.80	8.2	267.5	58	1781	85	2525
			26	04/30/2012	72	40517	.75	8.1	275.7	57	1838	84	2610
			27	04/30/2013	73	43796	.78	8.2	283.9	60	1898	88	2698
			28	04/30/2014	72	44439	.84	8.1	292.0	60	1958	88	2786
			29	04/30/2015	72	44439	.84	8.1	300.1	60	2018	88	2874
			30	04/30/2016	72	43874	.79	8.1	308.2	59	2076	87	2962

DETAIL DISCHARGE REPORT BY COUNTRY/UTILITY/REACTOR
 Firm Reactors
 Czech Republ

Utility	----- Reactor -----		Discharge Date	Disch Asbl	U-235 Burnup	Enr	-----MTU-----		-----KgPuF-----		-----KgPuT-----		
	Name	Type					Cycle	Total	Cum.	Total	Cum.	Total	Cum.
CEZ	Dukovany 2	PWR	31	04/30/2017	73	43796	.78	8.2	316.4	60	2136	88	3050
			32	04/30/2018	72	44439	.84	8.1	324.5	60	2196	88	3138
			33	04/30/2019	72	44439	.84	8.1	332.6	60	2256	88	3226
			34	04/30/2020	72	43874	.79	8.1	340.7	59	2315	87	3314
	Dukovany 3	PWR	1	11/28/1987	113	10908	.78	13.3	13.3	57	57	72	72
			2	11/26/1988	113	23462	.74	13.1	26.3	77	134	105	178
			3	11/04/1989	115	27858	1.11	13.2	39.5	84	217	113	291
			4	11/02/1990	108	28018	1.09	12.4	52.0	79	297	108	398
			5	10/18/1991	108	28417	.91	12.4	64.4	79	376	109	508
			6	10/24/1992	103	30085	.98	11.8	76.1	77	452	106	614
			7	11/19/1993	103	31344	.93	11.8	87.9	78	530	108	722
			8	12/29/1994	102	34542	.91	11.6	99.5	79	609	112	834
			9	02/23/1996	90	34995	.88	10.2	109.8	70	679	99	934
			10	03/08/1997	91	34311	.90	10.4	120.1	71	750	100	1034
			11	02/28/1998	90	34022	.87	10.3	130.4	69	819	99	1132
			12	03/21/1999	90	35000	.96	10.2	140.6	71	890	100	1232
			13	02/29/2000	91	35000	.96	10.3	151.0	71	961	101	1333
			14	02/28/2001	90	35000	.96	10.2	161.2	71	1032	100	1432
			15	02/28/2002	90	35000	.89	10.2	171.5	70	1102	100	1532
			16	02/28/2003	91	40174	.77	10.3	181.8	73	1175	107	1639
			17	02/29/2004	90	40229	.78	10.2	191.9	72	1247	105	1744
			18	02/28/2005	90	40229	.78	10.2	202.1	72	1319	105	1850
			19	02/28/2006	91	40174	.77	10.3	212.4	73	1391	107	1956
			20	02/28/2007	90	40616	.81	10.2	222.6	73	1464	106	2062
			21	02/29/2008	72	40035	.76	8.1	230.7	57	1521	84	2146
			22	02/28/2009	72	40519	.80	8.2	238.9	58	1579	85	2231
			23	02/28/2010	73	39968	.76	8.2	247.1	58	1637	85	2316
			24	02/28/2011	72	40519	.80	8.2	255.3	58	1695	85	2401
			25	02/29/2012	72	40517	.75	8.1	263.4	57	1752	84	2486
			26	02/28/2013	72	44439	.84	8.1	271.5	60	1812	88	2574
			27	02/28/2014	73	43796	.78	8.2	279.7	60	1871	88	2662
			28	02/28/2015	72	44439	.84	8.1	287.8	60	1931	88	2750
			29	02/29/2016	72	43874	.79	8.1	295.9	59	1990	87	2837
30	02/28/2017	72	44439	.84	8.1	304.0	60	2050	88	2925			
31	02/28/2018	73	43796	.78	8.2	312.2	60	2109	88	3014			
32	02/28/2019	72	44439	.84	8.1	320.4	60	2169	88	3102			
33	02/29/2020	72	43874	.79	8.1	328.4	59	2228	87	3189			
Dukovany 4	PWR	1	07/08/1988	114	10881	.78	13.4	13.4	57	57	73	73	
		2	07/01/1989	114	21639	.82	13.2	26.6	76	133	102	174	
		3	07/13/1990	109	29578	1.10	12.5	39.1	82	215	112	286	
		4	07/25/1991	108	29690	.97	12.4	51.5	80	295	111	397	
		5	08/29/1992	102	33150	.97	11.6	63.1	79	374	110	507	
		6	08/28/1993	103	32837	.93	11.8	74.9	79	453	111	618	
		7	09/14/1994	102	34161	.88	11.6	86.5	79	531	112	730	
		8	09/02/1995	96	34684	.90	10.9	97.4	74	606	106	835	
		9	08/23/1996	90	34257	.91	10.3	107.7	70	675	98	934	
		10	08/09/1997	90	33687	.84	10.3	117.9	69	744	98	1032	
		11	08/31/1998	91	34947	.96	10.4	128.3	71	816	101	1133	
		12	08/31/1999	90	35000	.96	10.2	138.5	71	887	100	1232	
		13	08/31/2000	90	35000	.96	10.2	148.7	71	957	100	1332	
		14	08/31/2001	91	35000	.96	10.3	159.1	71	1029	101	1433	
		15	08/31/2002	90	35000	.89	10.2	169.3	70	1099	100	1532	
		16	08/31/2003	90	40229	.78	10.2	179.5	72	1171	105	1638	
		17	08/31/2004	91	40174	.77	10.3	189.8	73	1243	107	1744	
		18	08/31/2005	90	40229	.78	10.2	200.0	72	1315	105	1850	
		19	08/31/2006	90	40229	.78	10.2	210.2	72	1387	105	1955	
		20	08/31/2007	91	40556	.80	10.3	220.5	73	1460	107	2062	
		21	08/31/2008	72	40519	.80	8.2	228.6	58	1518	85	2147	
		22	08/31/2009	72	40839	.74	8.1	236.8	57	1576	85	2232	
		23	08/31/2010	72	40035	.76	8.1	244.9	57	1633	84	2316	
		24	08/31/2011	73	40446	.79	8.3	253.2	59	1692	86	2402	
		25	08/31/2012	72	41094	.80	8.2	261.3	58	1750	85	2487	
		26	08/31/2013	72	43874	.79	8.1	269.4	59	1809	87	2574	
		27	08/31/2014	72	43874	.89	8.1	277.5	60	1868	87	2662	

DETAIL DISCHARGE REPORT BY COUNTRY/UTILITY/REACTOR
Firm Reactors
Czech Republ

Utility	----- Reactor -----		Discharge Date	Disch		U-235 Enr	-----MTU-----		-----KgPuF-----		-----KgPuT-----		
	Name	Type		Asbl	Burnup		Total	Cum.	Total	Cum.	Total	Cum.	
CEZ	Dukovany 4	PWR	28	08/31/2015	73	44354	.83	8.2	285.7	60	1929	89	2751
			29	08/31/2016	72	44439	.84	8.1	293.8	60	1988	88	2839
			30	08/31/2017	72	43874	.89	8.1	301.9	60	2048	87	2926
			31	08/31/2018	72	43874	.89	8.1	310.0	60	2108	87	3013
			32	08/31/2019	73	44354	.83	8.2	318.2	60	2168	89	3102
			33	08/31/2020	72	44439	.84	8.1	326.3	60	2228	88	3190
	Temelin 1	PWR	1	02/28/2002	42	5744	.83	20.6	20.6	63	63	76	76
			2	02/28/2003	42	11162	.90	20.5	41.1	88	152	112	188
			3	02/29/2004	42	19310	1.11	20.3	61.4	111	263	144	332
			4	02/28/2005	42	30721	1.00	20.0	81.3	130	394	181	513
			5	02/28/2006	38	45000	.63	17.7	99.1	128	521	193	706
			6	02/28/2007	38	45000	.63	17.7	116.8	128	649	193	899
			7	02/29/2008	38	45000	.63	17.7	134.6	128	777	193	1092
			8	02/28/2009	38	45000	.63	17.7	152.3	128	905	193	1286
			9	02/28/2010	38	50000	.56	17.6	169.9	131	1036	202	1488
			10	02/28/2011	36	50000	.60	16.7	186.7	125	1160	191	1679
			11	02/29/2012	36	50000	.60	16.7	203.4	125	1285	191	1870
			12	02/28/2013	36	50000	.60	16.7	220.1	125	1410	191	2062
			13	02/28/2014	36	50000	.60	16.7	236.8	125	1535	191	2253
			14	02/28/2015	36	55000	.52	16.6	253.4	127	1661	199	2452
			15	02/29/2016	34	55000	.58	15.7	269.1	121	1782	188	2640
			16	02/28/2017	34	55000	.58	15.7	284.8	121	1903	188	2828
			17	02/28/2018	34	55000	.58	15.7	300.5	121	2024	188	3016
			18	02/28/2019	34	55000	.58	15.7	316.1	121	2145	188	3204
			19	02/29/2020	34	60000	.47	15.6	331.7	119	2264	192	3396
	Temelin 2	PWR	1	05/31/2003	42	5766	.83	20.6	20.6	64	64	76	76
			2	05/31/2004	42	11199	.90	20.5	41.1	88	152	113	189
			3	05/31/2005	42	19325	1.11	20.3	61.4	112	264	144	333
			4	05/31/2006	42	30734	1.00	20.0	81.3	130	394	181	513
			5	05/31/2007	38	45000	.63	17.7	99.1	128	522	193	707
			6	05/31/2008	38	45000	.63	17.7	116.8	128	650	193	900
			7	05/31/2009	38	45000	.63	17.7	134.5	128	777	193	1093
			8	05/31/2010	38	45000	.63	17.7	152.3	128	905	193	1286
9			05/31/2011	38	50000	.56	17.6	169.9	131	1036	202	1488	
10			05/31/2012	36	50000	.60	16.7	186.7	125	1161	191	1679	
11			05/31/2013	36	50000	.60	16.7	203.4	125	1286	191	1871	
12			05/31/2014	36	50000	.60	16.7	220.1	125	1410	191	2062	
13			05/31/2015	36	50000	.60	16.7	236.8	125	1535	191	2254	
14			05/31/2016	36	55000	.52	16.6	253.4	127	1662	199	2453	
15			05/31/2017	34	55000	.58	15.7	269.1	121	1783	188	2641	
16			05/31/2018	34	55000	.58	15.7	284.8	121	1904	188	2829	
17			05/31/2019	34	55000	.58	15.7	300.4	121	2024	188	3017	
18	05/31/2020	34	55000	.58	15.7	316.1	121	2145	188	3205			