

Plant name:

Byron Station, Unit 2

Docket Number:

50-455

1

The minimum financial assurance (MFA) estimate pursuant to 10 CFR 50.75(b) & (c):¹

\$477,516,000

Did the licensee identify the amount of estimated radiological funds? (Y/N)

Y

2

The total amount of dollars accumulated at the end of the appropriate year: (see below)

Licensee:	% Owned:	Category:	Amount in Trust Fund:
Exelon Generation Company, LLC	100.00%	2	\$244,915,000

Total Trust Fund Balance

\$244,915,000

3

Schedule of the annual amounts remaining to be collected: (provided/none)

none

4

Assumptions used in determining rates of escalation in decommissioning costs, rates of earnings on decommissioning funds, and rates of other factors used in funding projections: (see below)

Rate of Return on Earnings	Escalation Rate	Rate(s) of Other Factors	Real Rate of Return	PUC Verified (Y/N)	Allowed through Decom (Y/N)	RAI Needed (Y/N)	Post-RAI		
							PUC Verified (Y/N)	Allowed through Decom (Y/N)	Rates Determined (Y/N)
			2.00%						

5

Any contracts upon which the licensee is relying? (Y/N)

N

6

Any modifications to a licensee's method of providing decommissioning funding assurance? (Y/N)

Y²

7

Any material changes to trust agreements? (Y/N)

N

If a change has occurred, the reviewer will document on this sheet that a change has occurred and identify the reviewer who will evaluate the change: (see below)

¹ Licensee calculated MFA higher than NRC calculations. Justification, including factors used, were provided to NRC for review. No further review required.

² Removed Parent Company Guarantee. Financial assurance is provided by a prepayment method, coupled with an external trust fund. No further review required.

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Date of Operation:

Month: 12

Day: 31

Year: 2010

Termination of Operations:

11

6

2026

BWR/PWR	MWth	1986\$	ECI	Base Lx		Lx	Px	Latest Month Px	Base Px	Fx	Latest Month Fx	Base Fx		Ex		Bx
PWR	3586	\$105,000,000	111.3	2.08	0.65	2.32	1.676	191.4	114.2	3.049	250.0	82.0	0.13	2.253	0.22	12.28

NRC Minimum:

\$472,417,086

Site Specific:

\$656,548,000

Licensee:	% Owned:	Category	Amount of NRC Minimum/Site Specific:	Amount in Trust Fund:
Exelon Generation Company, LLC	100.00%	2	\$656,548,000	\$244,915,000
Total Fund Balance:			\$244,915,000	

Step 1:
Earnings Credit:

Trust Fund Balance:	Real Rate of Return per year	Years Left in License	Total Earnings:	Does Licensee Pass:
\$244,915,000	2%	15.85	\$335,206,475	NO

Step 2:
Accumulation:

Value of Annuity per year (amount/See Annuity Sheet)	Real Rate of Return per year	Number of Annual Payments:	Total Annuity:
	2%		\$0
Total Annuity	Real Rate of Return per year	Years remaining after annuity	Total Step 2:
\$0	2%	15.85	\$0

Total Step 1 + Step 2	Does Licensee Pass:
\$335,206,475	NO

Step 3:
Decom Period:

Total Earnings:	Real Rate of Return per year	Decom Period:	Total Earnings for Decom:
\$335,206,475	2%	7	\$24,920,199

Total of Steps 1 thru 3:	Does Licensee Pass:	Shortfall:
\$360,126,674	NO	(\$296,421,326)

Signature: Shawn Harwell
Date: 8/3/2011
Signature: Aaron L. Szabo
Date: 8/15/2011

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If licensee is granted greater than 2% RRR

Step 4:				
Earnings Credit:				
Trust Fund Balance:	Real Rate of Return per year	Years Left in License	Total Earnings:	Does Licensee Pass:
\$244,915,000	2.00%	15.85	\$335,206,475	NO
Step 5:				
Accumulation:				
Value of Annuity per year	Real Rate of Return per year	Number of Annual Payments:	Total Annuity:	
\$0	2.00%	0	\$0	
Total Annuity	Real Rate of Return per year	Years remaining after annuity	Total Step 5	
\$0	2.00%	15.85	\$0	
			Total Step 4 + Step 5	Does Licensee Pass:
			\$335,206,475	NO
Step 6:				
Decom Period:				
Total Earnings:	Real Rate of Return per year	Decom Period:	Total Earnings for Decom:	
\$335,206,475	2.00%	7	\$24,920,199	
			Total of Steps 4 thru 6:	Does Licensee Pass:
			\$360,126,674	NO
				Shortfall:
				(\$296,421,326)

Signature: Shawn Harwell
Date: 8/3/2011
Signature: Aaron L. Szabo
Date: 8/15/2011

SAFSTOR ANALYSIS

Name of Unit: **Byron, Unit 2**
 Name of Licensee: **EGC**
 Date of Termination of Operations **11 6 2026**
 End of Operations Balance: **\$335,206,475**
 Operating Life Real Rate of Return: **2.00%**
 Decommissioning Real Rate of Return: **2.00%**

Year	Beginning Trust Fund Balance	Expense Per Year		Real Rate of Return	End of Year Trust Fund Balance
		Cost in 2010 dollars	Spent Fuel		
2026	\$334,176,580	\$7,778,000	N/A	2.00%	\$333,004,332
2027	\$333,004,332	\$57,569,000	N/A	2.00%	\$281,519,729
2028	\$281,519,729	\$34,472,000	N/A	2.00%	\$252,333,403
2029	\$252,333,403	\$3,682,000	N/A	2.00%	\$253,661,251
2030	\$253,661,251	\$3,682,000	N/A	2.00%	\$255,015,656
2031	\$255,015,656	\$3,682,000	N/A	2.00%	\$256,397,149
2032	\$256,397,149	\$3,686,000	N/A	2.00%	\$257,802,232
2033	\$257,802,232	\$3,673,000	N/A	2.00%	\$259,248,547
2034	\$259,248,547	\$3,673,000	N/A	2.00%	\$260,723,788
2035	\$260,723,788	\$3,673,000	N/A	2.00%	\$262,228,534
2036	\$262,228,534	\$3,683,000	N/A	2.00%	\$263,753,274
2037	\$263,753,274	\$3,673,000	N/A	2.00%	\$265,318,610
2038	\$265,318,610	\$3,673,000	N/A	2.00%	\$266,915,252
2039	\$266,915,252	\$3,673,000	N/A	2.00%	\$268,543,827
2040	\$268,543,827	\$3,683,000	N/A	2.00%	\$270,194,874
2041	\$270,194,874	\$3,673,000	N/A	2.00%	\$271,889,041
2042	\$271,889,041	\$3,673,000	N/A	2.00%	\$273,617,092
2043	\$273,617,092	\$3,660,000	N/A	2.00%	\$275,392,834
2044	\$275,392,834	\$3,670,000	N/A	2.00%	\$277,193,990
2045	\$277,193,990	\$3,660,000	N/A	2.00%	\$279,041,270
2046	\$279,041,270	\$3,660,000	N/A	2.00%	\$280,925,496
2047	\$280,925,496	\$3,660,000	N/A	2.00%	\$282,847,406
2048	\$282,847,406	\$3,670,000	N/A	2.00%	\$284,797,654
2049	\$284,797,654	\$3,660,000	N/A	2.00%	\$286,797,007
2050	\$286,797,007	\$3,660,000	N/A	2.00%	\$288,836,347
2051	\$288,836,347	\$3,660,000	N/A	2.00%	\$290,916,474
2052	\$290,916,474	\$3,670,000	N/A	2.00%	\$293,028,103
2053	\$293,028,103	\$3,660,000	N/A	2.00%	\$295,192,065
2054	\$295,192,065	\$3,660,000	N/A	2.00%	\$297,399,307
2055	\$297,399,307	\$3,660,000	N/A	2.00%	\$299,650,693
2056	\$299,650,693	\$3,670,000	N/A	2.00%	\$301,937,007
2057	\$301,937,007	\$3,660,000	N/A	2.00%	\$304,279,147
2058	\$304,279,147	\$3,660,000	N/A	2.00%	\$306,668,130
2059	\$306,668,130	\$3,660,000	N/A	2.00%	\$309,104,892
2060	\$309,104,892	\$3,670,000	N/A	2.00%	\$311,580,290
2061	\$311,580,290	\$3,660,000	N/A	2.00%	\$314,115,296
2062	\$314,115,296	\$3,660,000	N/A	2.00%	\$316,701,002

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2063	\$316,701,002	\$3,660,000	N/A	2.00%	\$319,338,422
2064	\$319,338,422	\$3,670,000	N/A	2.00%	\$322,018,490
2065	\$322,018,490	\$3,660,000	N/A	2.00%	\$324,762,260
2066	\$324,762,260	\$3,660,000	N/A	2.00%	\$327,560,905
2067	\$327,560,905	\$3,660,000	N/A	2.00%	\$330,415,523
2068	\$330,415,523	\$3,670,000	N/A	2.00%	\$333,317,134
2069	\$333,317,134	\$3,660,000	N/A	2.00%	\$336,286,877
2070	\$336,286,877	\$3,660,000	N/A	2.00%	\$339,316,014
2071	\$339,316,014	\$3,660,000	N/A	2.00%	\$342,405,734
2072	\$342,405,734	\$3,670,000	N/A	2.00%	\$345,547,149
2073	\$345,547,149	\$3,660,000	N/A	2.00%	\$348,761,492
2074	\$348,761,492	\$3,660,000	N/A	2.00%	\$352,040,122
2075	\$352,040,122	\$3,660,000	N/A	2.00%	\$355,384,324
2076	\$355,384,324	\$3,670,000	N/A	2.00%	\$358,785,311
2077	\$358,785,311	\$3,660,000	N/A	2.00%	\$362,264,417
2078	\$362,264,417	\$13,930,000	N/A	2.00%	\$355,440,405
2079	\$355,440,405	\$36,308,000	N/A	2.00%	\$325,878,134
2080	\$325,878,134	\$95,253,000	N/A	2.00%	\$236,190,166
2081	\$236,190,166	\$79,191,000	N/A	2.00%	\$160,931,060
2082	\$160,931,060	\$61,556,000	N/A	2.00%	\$101,978,121
2083	\$101,978,121	\$61,556,000	N/A	2.00%	\$41,846,123
2084	\$41,846,123	\$29,171,000	N/A	2.00%	\$13,220,336
2085	\$13,220,336	\$38,000	N/A	2.00%	\$13,446,362
2086	\$13,446,362	\$38,000	N/A	2.00%	\$13,676,910
2087	\$13,676,910	\$12,000	N/A	2.00%	\$13,938,328

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Date: 8/15/2011