



Draft 2024 Policy Study Errata Announcement: Correction to Modeling Results

February 8, 2024

On January 22, 2024 the Illinois Power Agency released a [draft Policy Study](#) for [stakeholder feedback](#) pursuant to Public Act 103-0580. The draft Policy Study contains an analysis of the potential impacts of the adoption of policies to support energy storage, offshore wind, and a high voltage direct transmission line (SOO Green). Stakeholder feedback is due on Monday, February 12, 2024.

The Agency has identified an error in how some modeling results were reported in the draft Policy Study that understated the potential benefits associated with the energy storage policy option. Errors were also found in the presentation of costs for SOO Green and in the combined case model that looked at adopting all three of the policies studied.

The primary error occurred when the energy revenue outputs for the energy storage modeling and the offshore wind component of the combined results were transferred into summary spreadsheets for use in the preparation of the draft Policy Study. More specifically, certain data outputs of Aurora (the production cost simulation model used for the Policy Study to model impacts on wholesale electricity prices, emissions, and changes to the composition and operation of the generation resource mix in Illinois) are reported in thousands of dollars,¹ and those were not consistently updated during the transfer to the summary spreadsheets. Additional errors include: (1) the use of an incorrect financing carrying cost that did not reflect the benefits of the Investment Tax Credit, affecting the cost calculations for distributed energy storage; (2) the use of inflation-adjusted costs rather than nominal costs in certain tables, affecting the cost calculations for SOO Green; and (3) the cost calculation erroneously double-counted certain project revenues for SOO Green, affecting the combined case results. The errors did not impact the reporting of results of the modeling for offshore wind as a stand-alone case.

The erroneous data were presented in several tables and figures in the Policy Study, discussion of impacts in the Executive Summary and Chapter 5, and in [Appendix E](#) to the Policy Study that provided additional details of the Aurora modeling.

The Agency will incorporate the changes to the modeling results described in this announcement, as well as any additional changes that the Agency identifies through ongoing internal review, or from stakeholder feedback into the final Policy Study. If the Agency identifies additional changes, those will be described in the final Policy Study, rather than through the issuing of additional errata announcements.

¹ For example, the Aurora model outputs \$1,000,000 as \$1,000.

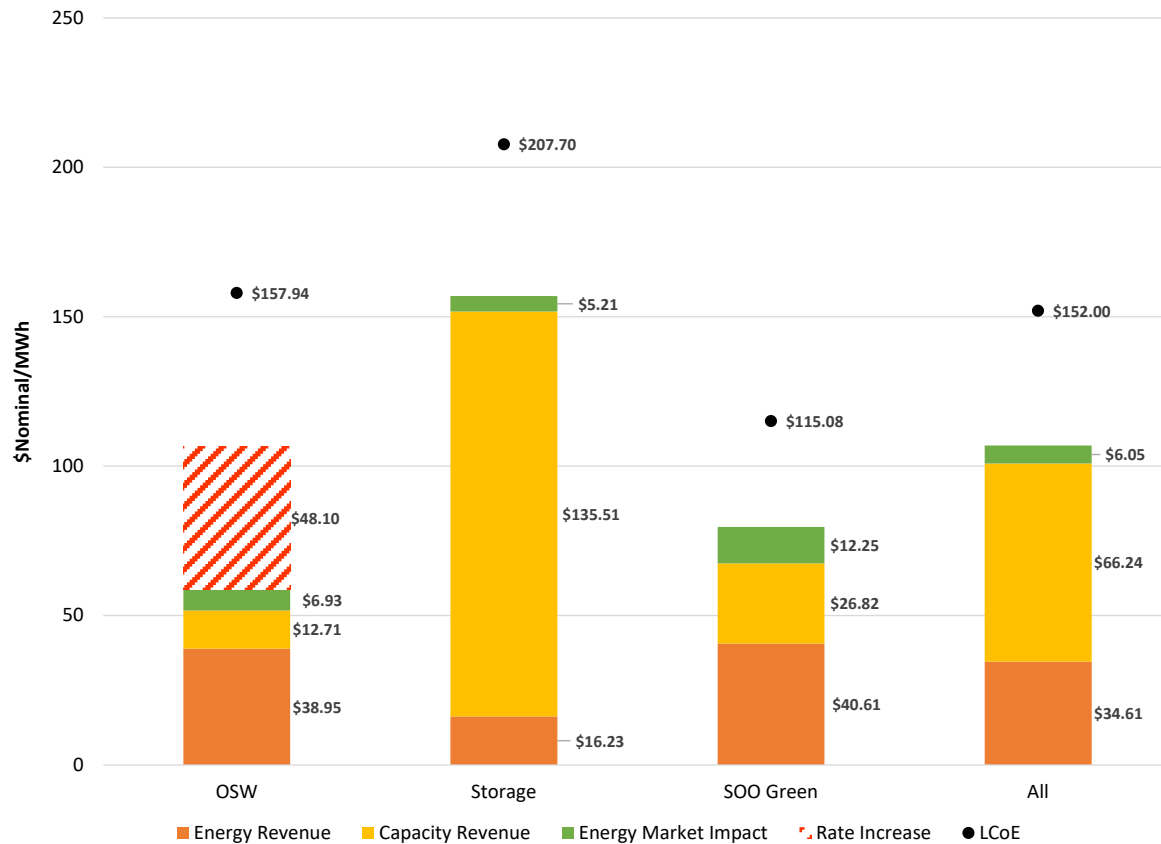
After releasing the draft Policy Study, the Agency received a request for a meeting to clarify certain aspects of the draft from representatives of the energy storage industry. In response to that meeting the Agency developed additional spreadsheets of detailed information from the cost estimates and Aurora modeling of benefits. In the interest of transparency, the Agency will be making those spreadsheets available to all stakeholders through the Energy Policy Study [webpage](#).

The Agency deeply apologizes for these errors and issued this errata announcement as quickly as possible after the errors were identified. The Agency hopes that stakeholders will find this update beneficial in their preparation of feedback on the draft Policy Study.

Corrected Figures, Tables, and report text are presented below, along with additional details on how the errors were corrected contained in **red text**.

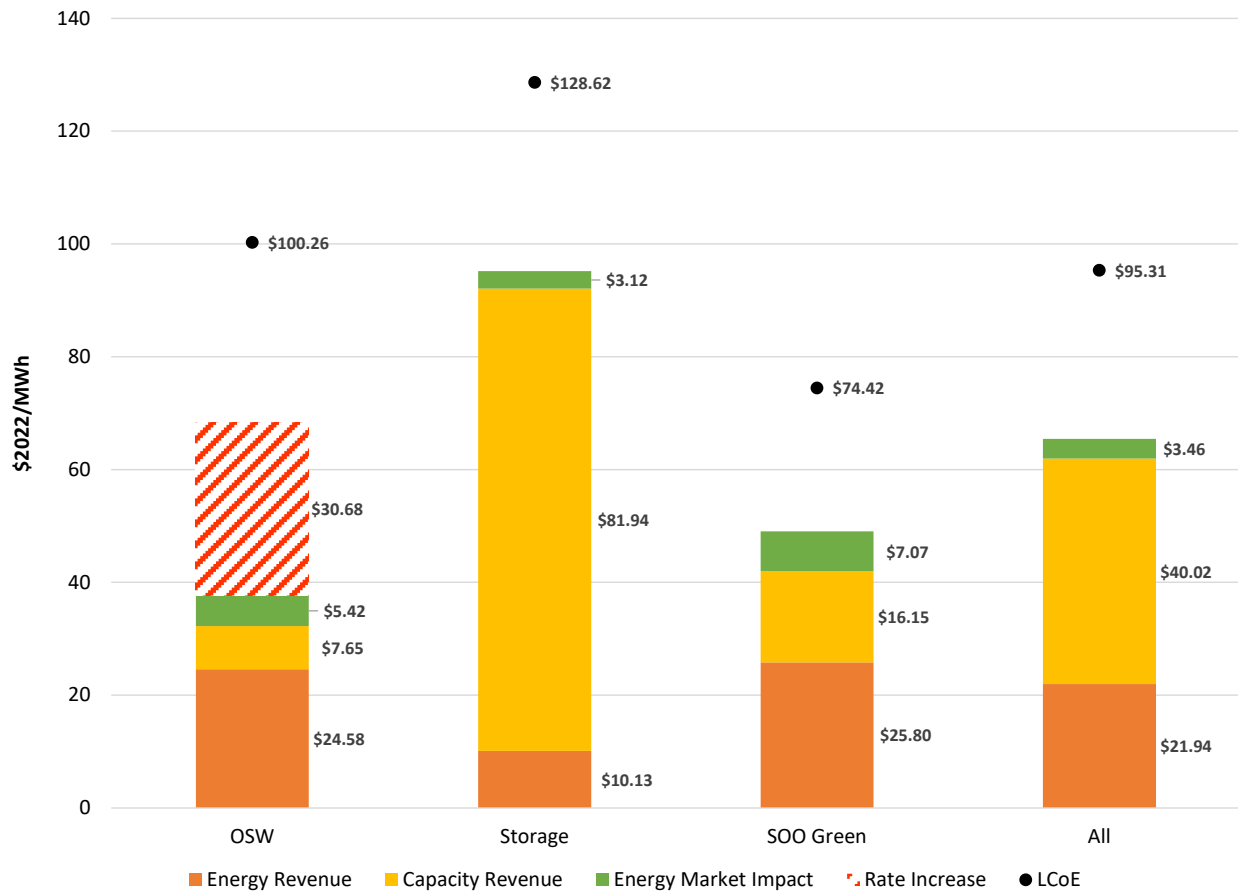
Appendix E: Figure 23 (Figure 8-12)

Summary Projections, 2030-2049 (Nominal)



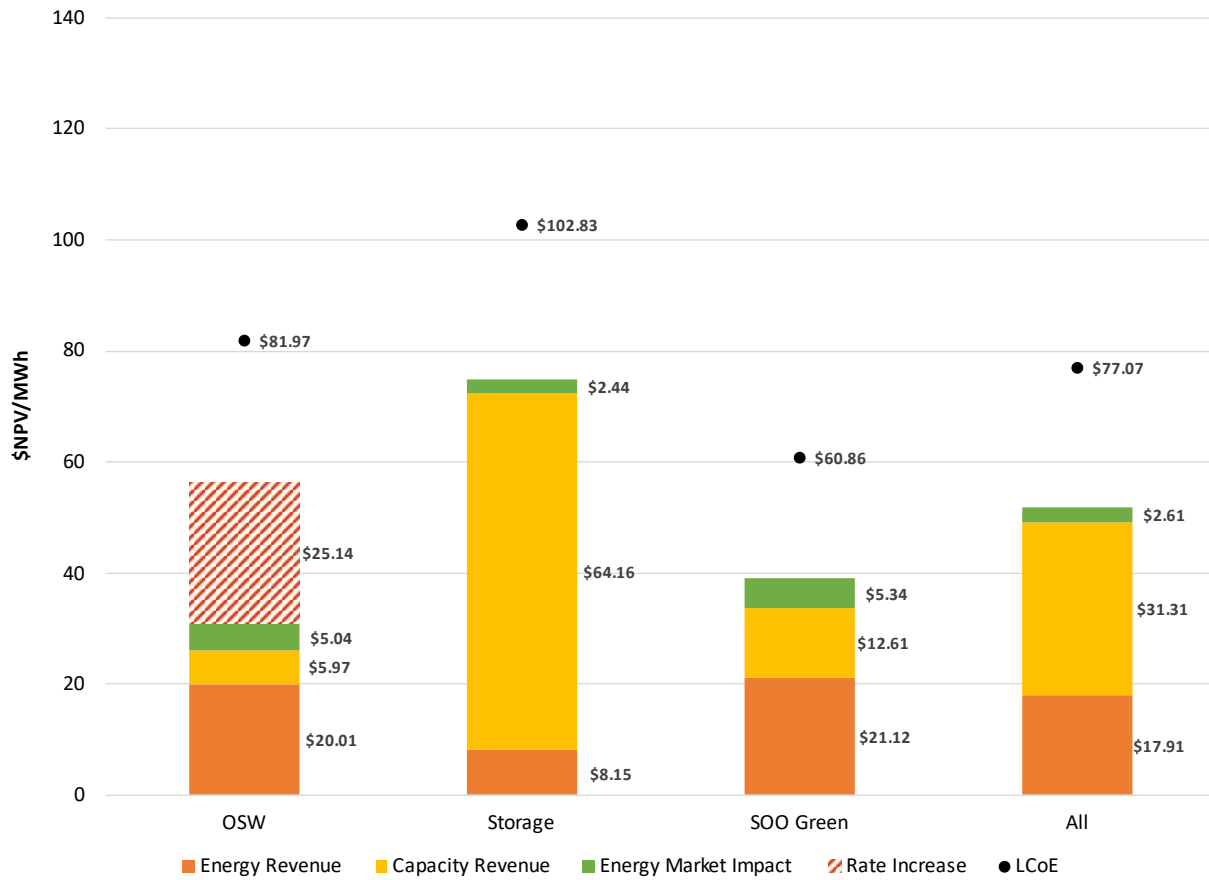
In the January 22, 2024 draft Policy Study, Energy Revenue in Figure 23 for Energy Storage was erroneously presented as \$0.02 and Energy Revenue for All was erroneously presented as \$21.84.

**Appendix E: Figure 24 (Not included in body of Policy Study)
Summary Projections, 2030-2049 (\$2022)**



In the January 22, 2024 Draft Policy Study, Energy Revenue in Figure 24 for Energy Storage was erroneously presented as \$0.01 and Energy Revenue for All was erroneously presented as \$13.87.

**Appendix E: Figure 25 (Not included in body of Policy Study)²
Summary Projections, 2030-2049 (NPV with 2% Discount Rate)**



In the January 22, 2024 draft Policy Study, Energy Revenue in Figure 25 for Energy Storage was erroneously presented as \$0.01 and Energy Revenue for All was erroneously presented as \$13.87.

² This figure also contained an error in the net present value unit calculation of several values (Energy Revenue, Capacity Revenue, Energy Market Impact) for each case. The output (MWh) was erroneously discounted in the unitization of these values. The Levelized Cost of Energy (“LCoE”) values remain the same.

**Appendix E: Table 2 (Table 8-7)
Summary Projections, 2030-2049 Contract Period (\$1,000 Nominal)**

<i>Case</i>	<i>Costs</i>	<i>Energy Revenue</i>	<i>Capacity Revenue</i>	<i>Net Market Revenues</i>	<i>Energy Market Impact</i>	<i>Total</i>	<i>Energy Output</i>
	<i>\$1,000 Nominal</i>						<i>GWh</i>
OSW	2,158,740	532,408	173,669	-\$1,452,663	94,711	-1,357,952	13,668
Storage	33,916,273	2,649,688	22,127,646	-\$9,138,939	850,151	-8,288,788	163,294
SOO Green	30,566,972	10,786,691	7,123,211	-\$12,657,071	3,254,217	-9,402,854	265,620
All	66,641,986	14,166,522	29,288,778	-\$23,186,686	2,676,269	-20,510,417	442,148

In the version of this table in the January 22, 2024 draft Policy Study the following values were erroneously presented. Energy Revenue for Energy Storage was listed as \$2,650; Net Market Revenues as -\$11,785,977; and Total as -\$10,935,826. SOO Green Costs were listed as \$39,633,821; Net Market Revenues as -\$21,723,920; and Total as -\$18,469,703. Costs for the All case were listed as \$85,115,605; Energy Revenue as \$9,656,633; Net Market Revenues as -\$46,170,194; and Total as -\$43,493,925. Changes to the table are indicated above in bold font.

**Appendix E: Table 6 (Table 8-10)
Distributed Project Annualized (\$2022) Summary**

<i>Description</i>	<i>Costs</i>	<i>Energy Revenue</i>	<i>Capacity Revenue</i>	<i>Net Market Revenues</i>	<i>Energy Market Impact</i>	<i>Total</i>
Storage (\$1,000 2022)	\$197,891	\$12,947	\$94,471	-\$90,472	\$4,335	-\$86,137
Storage (\$2022/MWh)	\$7.92	\$0.52	\$3.78	-\$3.62	\$0.17	-\$3.45

In the version of this table in the January 22, 2024 draft Policy Study the following values were erroneously presented. Storage (\$1000 2022) line Costs were listed as \$253,129; Energy Revenue as \$13; Net Market Revenues as -\$158,645; and Total as -\$154,310. For the Storage (\$2022/MWh) line, Costs were listed as \$10.13; Energy Revenue as \$9,656,633; Net Market Revenues as -\$46,170,194; and Total as -\$43,493,925. Changes to the table are indicated above in bold font.

**Appendix E: Table 7 (Table 8-11)
Project Annualized (\$1,000 2022) Summary**

<i>Case</i>	<i>Costs</i>	<i>Energy Revenue</i>	<i>Capacity Revenue</i>	<i>Net Market Revenues</i>	<i>Energy Market Impact</i>	<i>Total</i>
OSW	\$68,518	\$16,799	\$5,229	-\$46,490	\$3,704	-\$42,786
Storage	\$1,050,160	\$82,699	\$669,025	-\$298,436	\$25,450	-\$272,986
SOO Green	\$988,425	\$342,697	\$214,476	-\$431,253	\$93,896	-\$337,356
All	\$2,107,103	\$448,813	\$884,643	-\$773,647	\$76,566	-\$697,081

In the version of this table in the January 22, 2024 draft Policy Study the following values were erroneously presented. Costs for the All case were listed as \$2,664,275; Energy Revenue for Storage as \$83; and All as \$306,457, Net Market Revenues for Storage as -\$381,052 and All as -\$1,473,085, and Total for Storage as -\$355,602, and for All as -\$1,396,519. Changes to the table are indicated above in bold font.

In the Executive Summary the second paragraph on page iv should be corrected to read:

Further, the proposed utility-scale energy storage development would impact Illinois electricity prices in two ways: (i) based on the netting out an estimate of the revenue the projects would receive from capacity and energy sales, the study estimates a ~~\$381~~ 298 million per year difference—this would be the annualized cost that would be supported by Illinois ratepayers through the purchase of energy storage credits from the projects by the utilities; and (ii) the storage projects would benefit ratepayers by impacting wholesale energy costs, lowering those costs for Illinois ratepayers by \$850.2 million over 20 years, or \$25.5 million on an annualized basis in 2022 dollars. Deploying 1,000 MW of distributed energy storage would have an annualized cost of ~~\$158.6~~ 86.1 million, while contributing \$4.3 million in lowering wholesale electricity costs.

In Chapter 5, the third from last paragraph on page 93 should be corrected to read:

First, based on the netting out an estimate of the revenue the projects would receive from capacity and energy sales, there would be a ~~\$381~~ 298 million per year difference. This would be the annualized cost that would be supported by Illinois ratepayers through the purchase of energy storage credits from the projects.

The last paragraph on page 93 should be corrected to read:

Deploying 1,000 MW of distributed energy storage would have an annualized cost of ~~\$158.6~~ 86.1 million, while contributing \$4.3 million in lower wholesale electricity costs.

The following tables illustrates how the error in conversion of Aurora results impacted Appendix E Table 2 (Table 8-7).

Energy Revenue for Energy Storage:

	Contract Year	Raw (\$M)	Draft Report (\$M)	Corrected (\$)	Corrected (\$M)
		[1]	[2]	[3]	[4]
			[1] / 1000	[1] * 1000	[3] / 1000
2030	1	35,192	35	35,192,096	35,192
2031	2	60,734	61	60,733,567	60,734
2032	3	75,993	76	75,993,249	75,993
2033	4	93,142	93	93,142,175	93,142
2034	5	105,869	106	105,869,422	105,869
2035	6	111,426	111	111,425,522	111,426
2036	7	122,326	122	122,326,034	122,326
2037	8	135,026	135	135,026,404	135,026
2038	9	143,016	143	143,015,982	143,016
2039	10	151,857	152	151,856,994	151,857
2040	11	162,061	162	162,060,923	162,061
2041	12	182,217	182	182,217,222	182,217
2042	13	182,231	182	182,230,659	182,231
2043	14	146,250	146	146,249,718	146,250
2044	15	142,961	143	142,961,005	142,961
2045	16	161,867	162	161,866,715	161,867
2046	17	152,318	152	152,318,059	152,318
2047	18	185,154	185	185,153,770	185,154
2048	19	146,434	146	146,433,737	146,434
2049	20	153,615	154	153,615,093	153,615
Total		2,649,688	2,650	2,649,688,346	2,649,688
			(Table 8-7)		(Revised)

Energy Revenue for All Case:

	Contract Year	SOO Green (\$)	Wind (\$M)	Storage (\$M)	Draft (\$M)	Corrected (\$M)
		[1]	[2]	[3]	[3]	[4]
					$([1] + [2] + [3]) / 1000$	$[1] / 1000 + [2] + [3]$
2030	1	385,874,735	21,023	52,005	385,948	458,902
2031	2	391,970,042	21,314	91,676	392,083	504,960
2032	3	393,821,454	21,462	118,985	393,962	534,268
2033	4	403,638,909	21,931	141,417	403,802	566,986
2034	5	408,022,959	22,374	169,416	408,215	599,813
2035	6	423,622,452	23,190	183,234	423,829	630,047
2036	7	437,387,787	24,002	191,833	437,604	653,223
2037	8	445,626,051	24,489	215,296	445,866	685,411
2038	9	461,951,325	26,010	242,524	462,220	730,485
2039	10	471,390,369	25,878	237,237	471,653	734,505
2040	11	491,072,073	27,572	273,155	491,373	791,799
2041	12	514,233,563	28,611	310,232	514,572	853,076
2042	13	515,763,512	28,933	315,281	516,108	859,977
2043	14	521,895,730	29,004	232,026	522,157	782,926
2044	15	528,116,538	29,037	222,688	528,368	779,841
2045	16	530,181,018	29,385	211,408	530,422	770,975
2046	17	555,983,109	30,817	204,878	556,219	791,679
2047	18	574,070,647	31,757	203,832	574,306	809,659
2048	19	592,893,121	32,390	181,697	593,107	806,980
2049	20	604,602,880	33,062	183,346	604,819	821,011
Total		9,652,118,273	532,240	3,982,164	9,656,633	14,166,522
					(Table 8-7)	(Revised)