

## **Appendix A – Hourly System Loads**











**IMPA 2022 Hourly Loads**

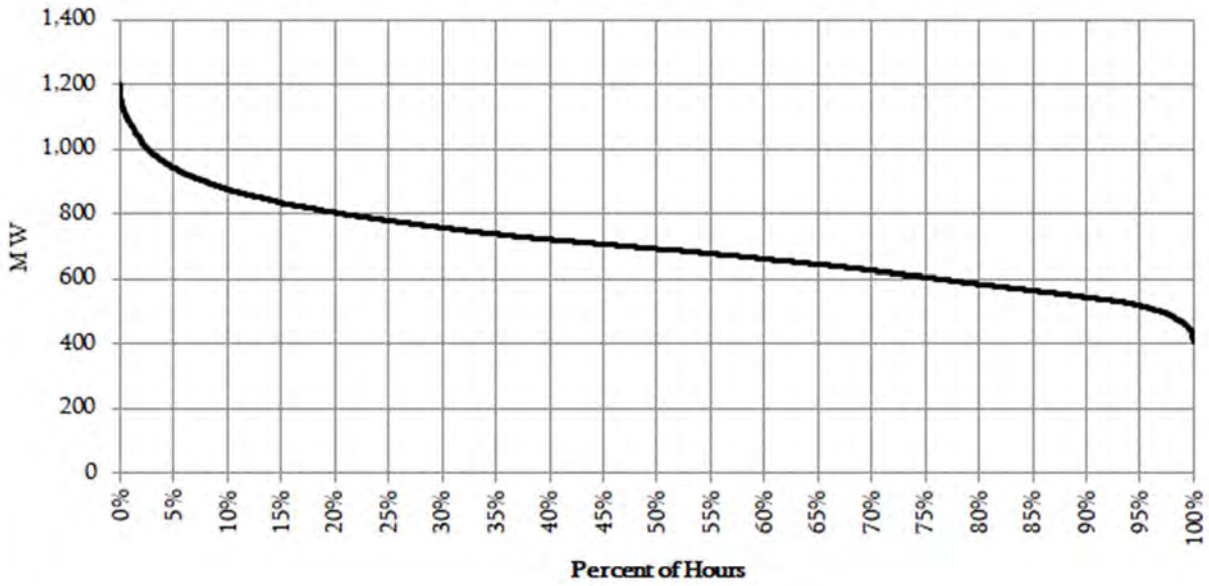
Date	Time Zone	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
12/22/2022	EST	683	670	665	662	665	692	733	774	786	792	798	789	777	773	756	736	740	767	788	795	799	797	784	771
12/23/2022	EST	770	773	776	785	799	817	840	869	882	907	920	923	922	920	915	913	917	940	949	935	920	896	866	838
12/24/2022	EST	816	801	791	785	779	783	792	806	819	833	834	827	817	796	782	770	767	786	799	791	782	770	756	740
12/25/2022	EST	724	714	708	706	708	714	728	747	756	757	747	734	714	694	676	667	675	707	731	732	730	721	705	686
12/26/2022	EST	669	659	649	644	648	660	676	697	709	725	742	746	746	740	732	730	733	751	761	746	732	714	689	664
12/27/2022	EST	644	634	631	632	645	673	710	753	767	778	791	786	762	781	772	765	761	775	781	773	762	743	716	692
12/28/2022	EST	676	667	664	664	672	695	731	763	774	771	766	750	734	723	705	687	678	695	718	710	699	679	652	621
12/29/2022	EST	601	587	578	578	582	603	634	662	665	673	684	683	676	663	654	645	639	647	653	641	624	605	574	551
12/30/2022	EST	527	512	505	502	503	520	551	580	594	604	618	619	616	613	603	596	598	609	610	598	589	573	550	525
12/31/2022	EST	509	496	489	486	487	492	503	519	532	547	563	569	568	558	546	539	542	563	577	567	557	545	530	517

## **Appendix B – Historic System Load Shapes**

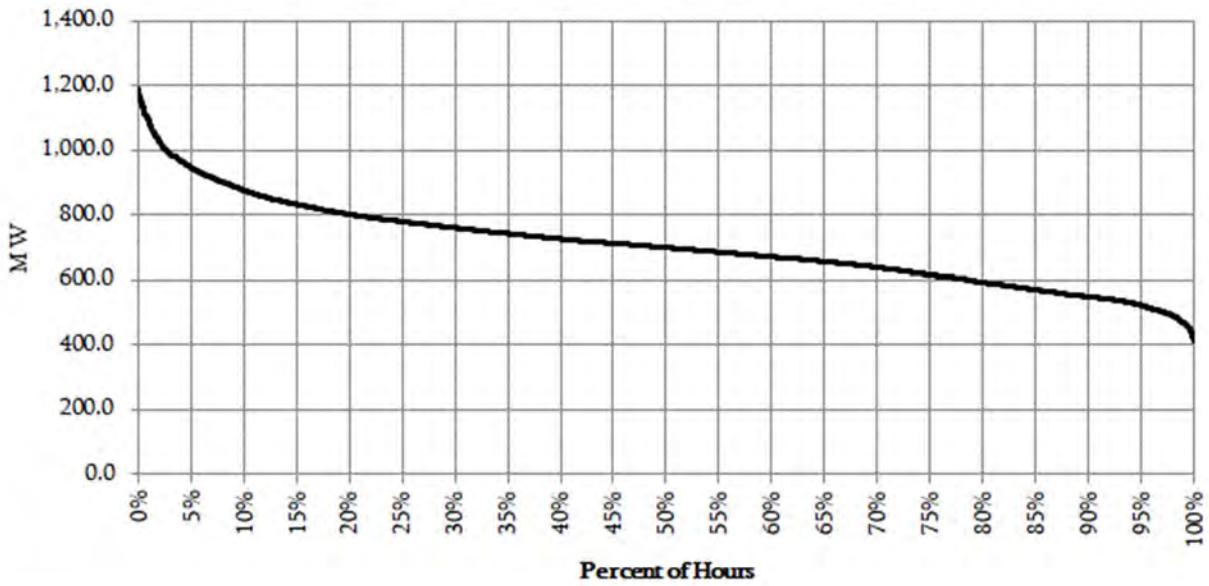


# Annual Load Duration Curves

### IMPA Load Duration Curve - 2021

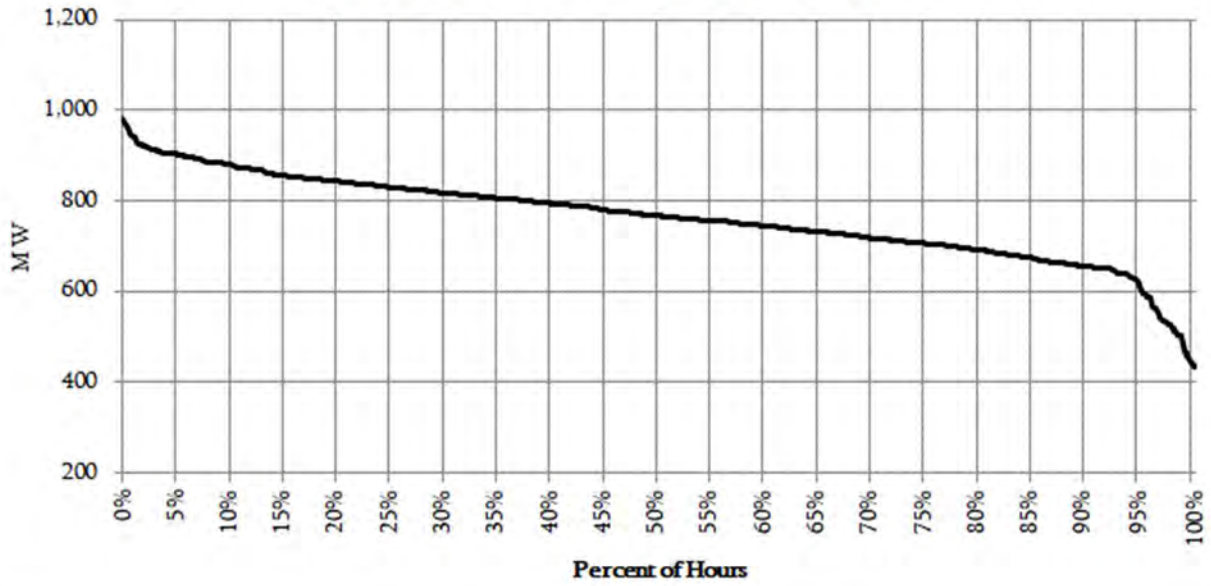


### IMPA Load Duration Curve - 2022

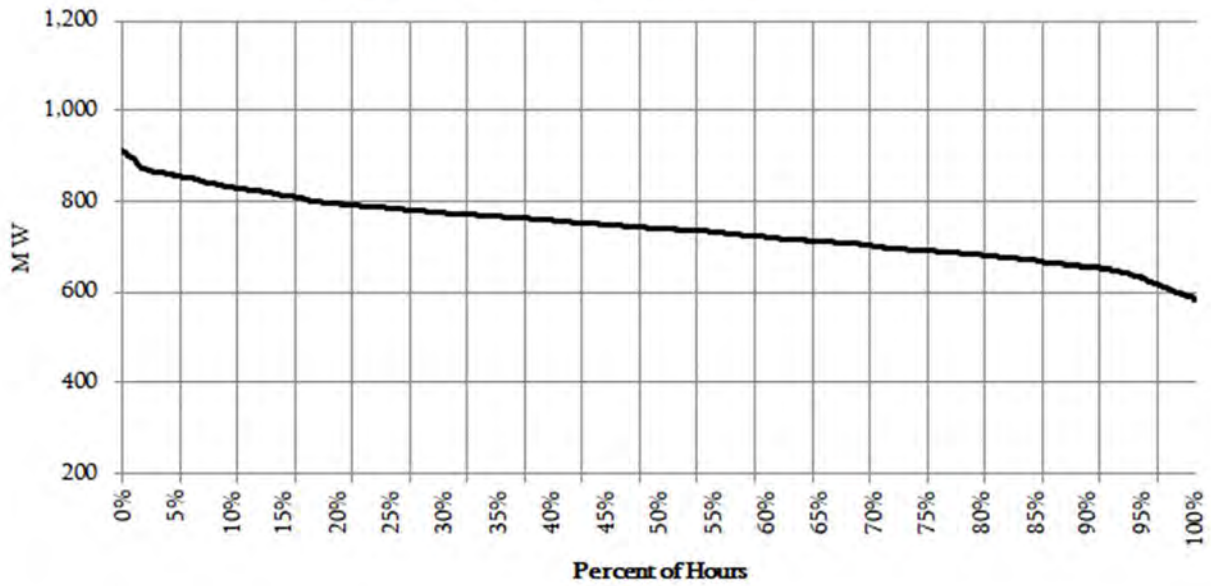


# Monthly Load Duration Curves

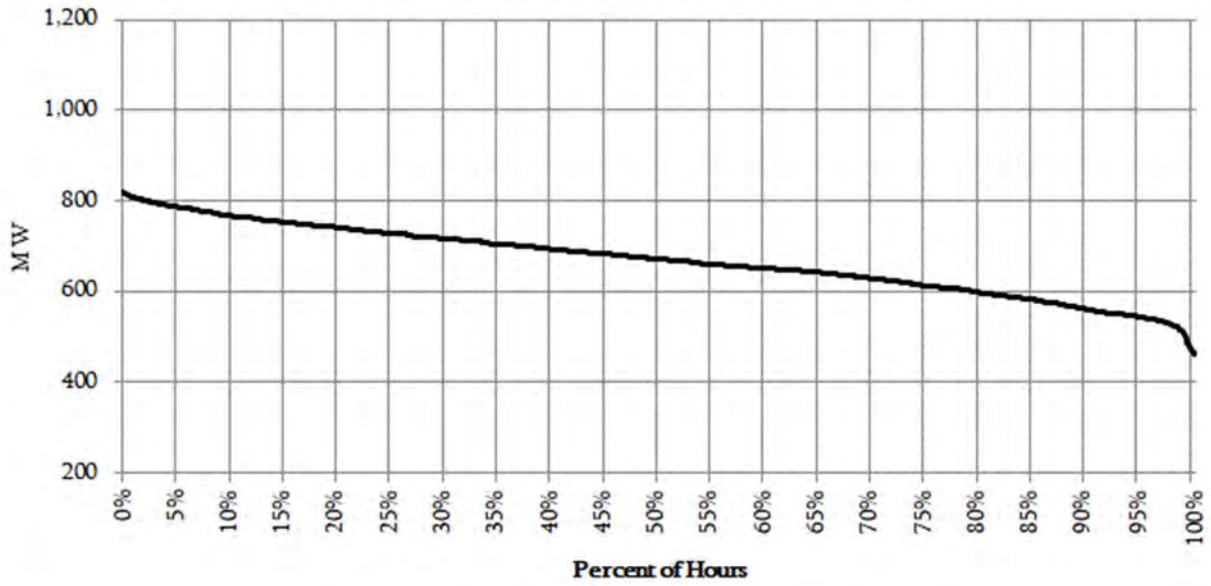
### IMPA Load Duration Curve - Jan



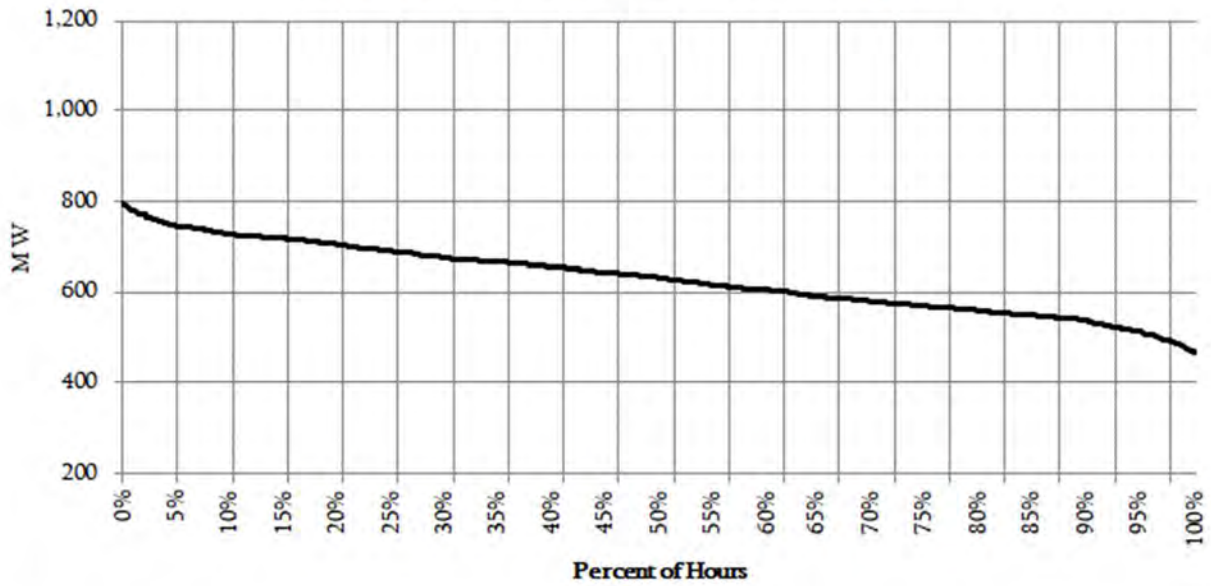
### IMPA Load Duration Curve - Feb



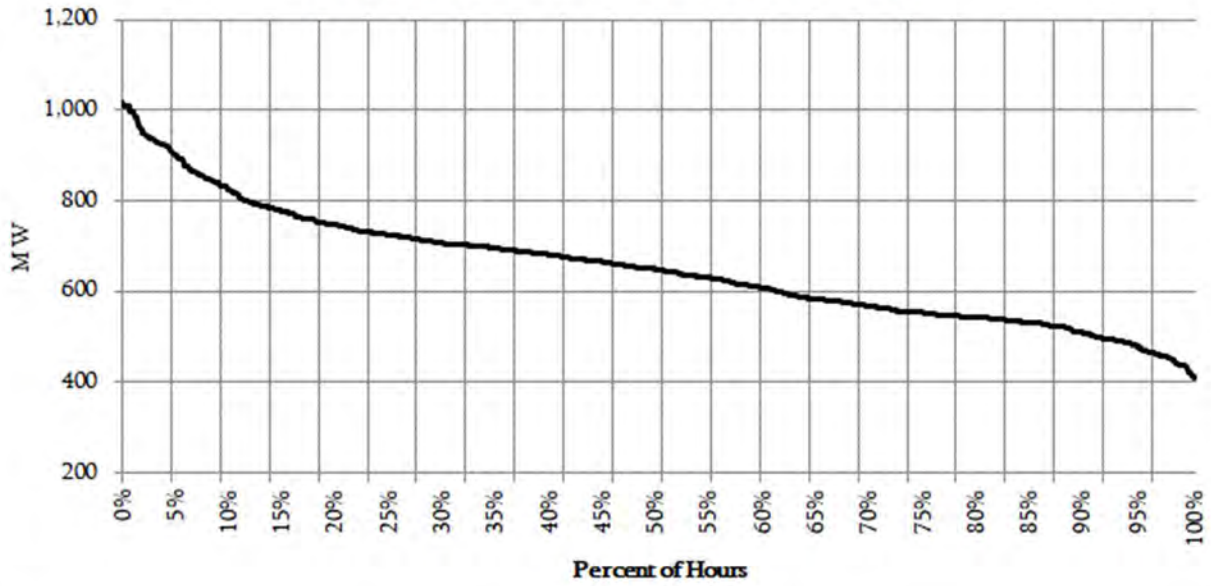
### IMPA Load Duration Curve - Mar



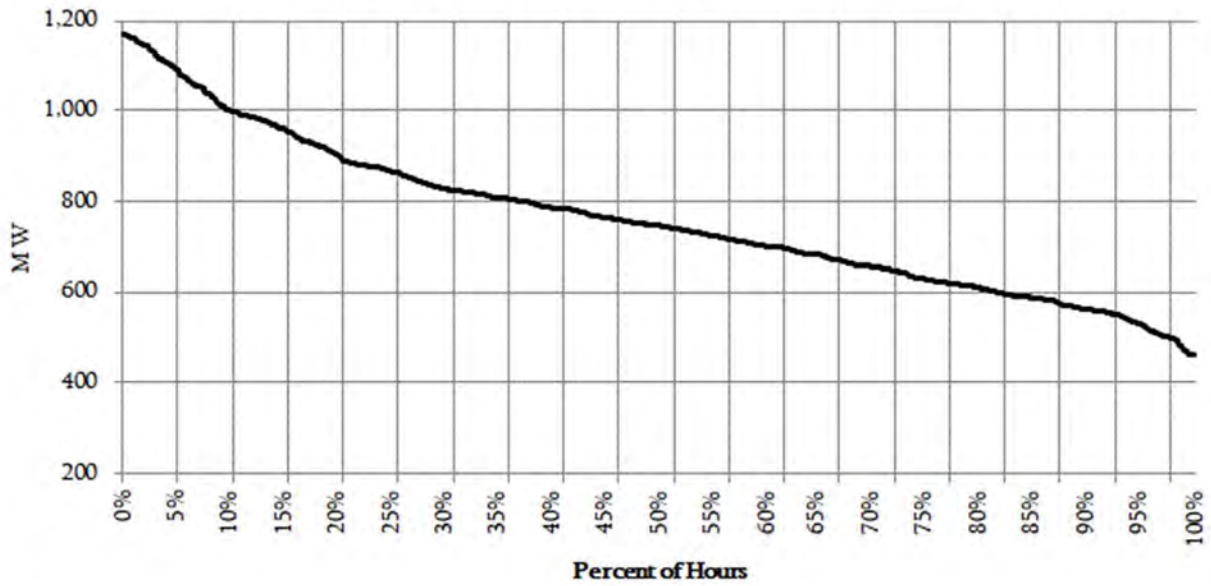
### IMPA Load Duration Curve - Apr



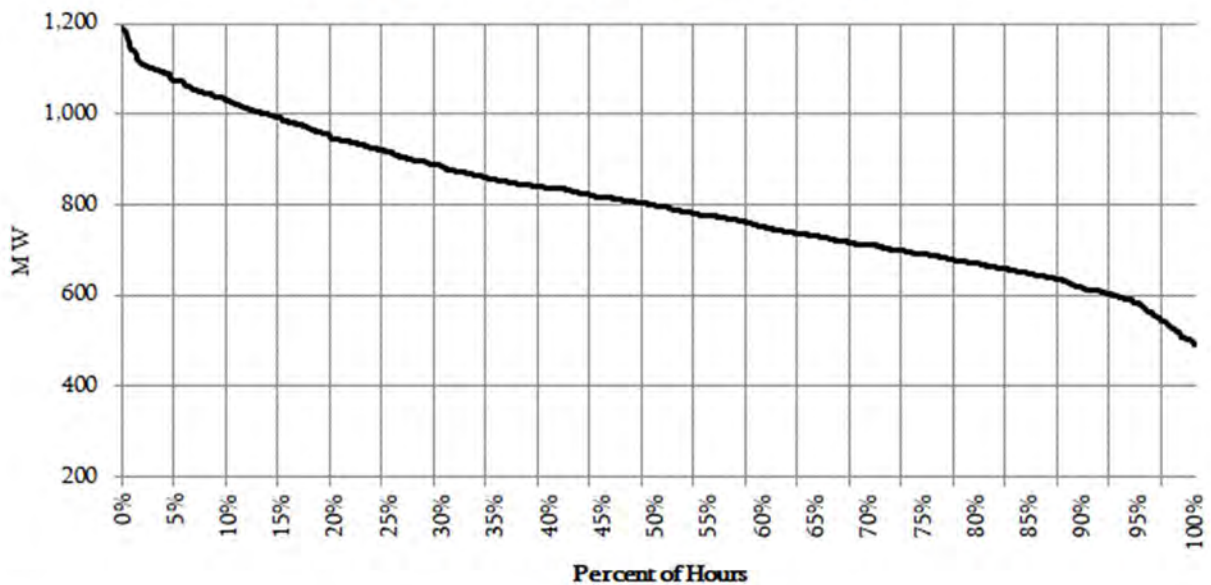
### IMPA Load Duration Curve - May



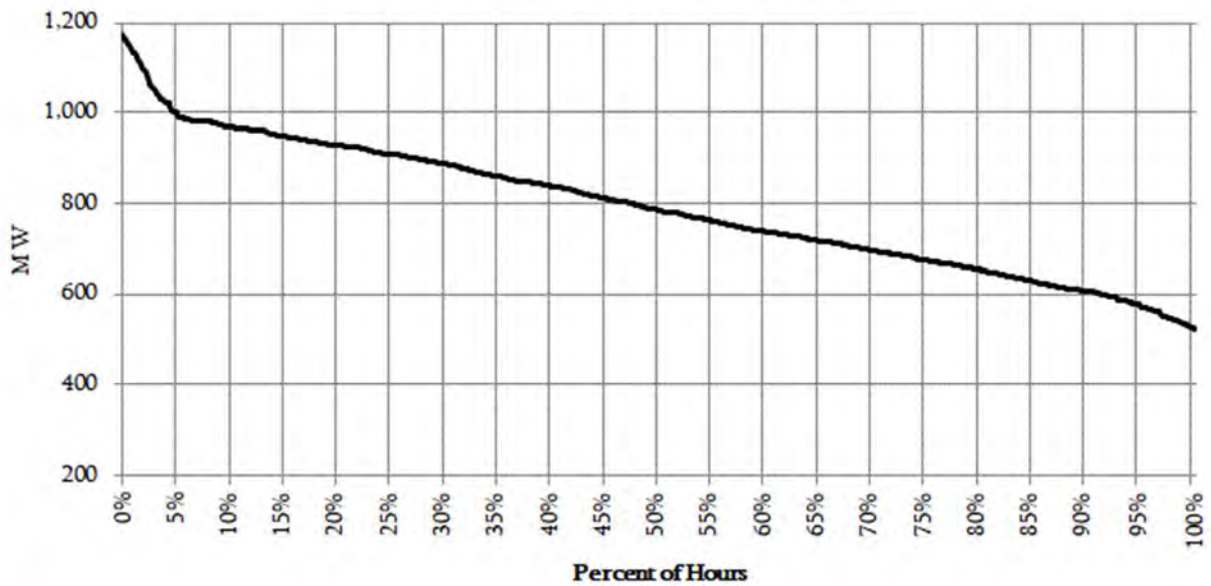
### IMPA Load Duration Curve - Jun



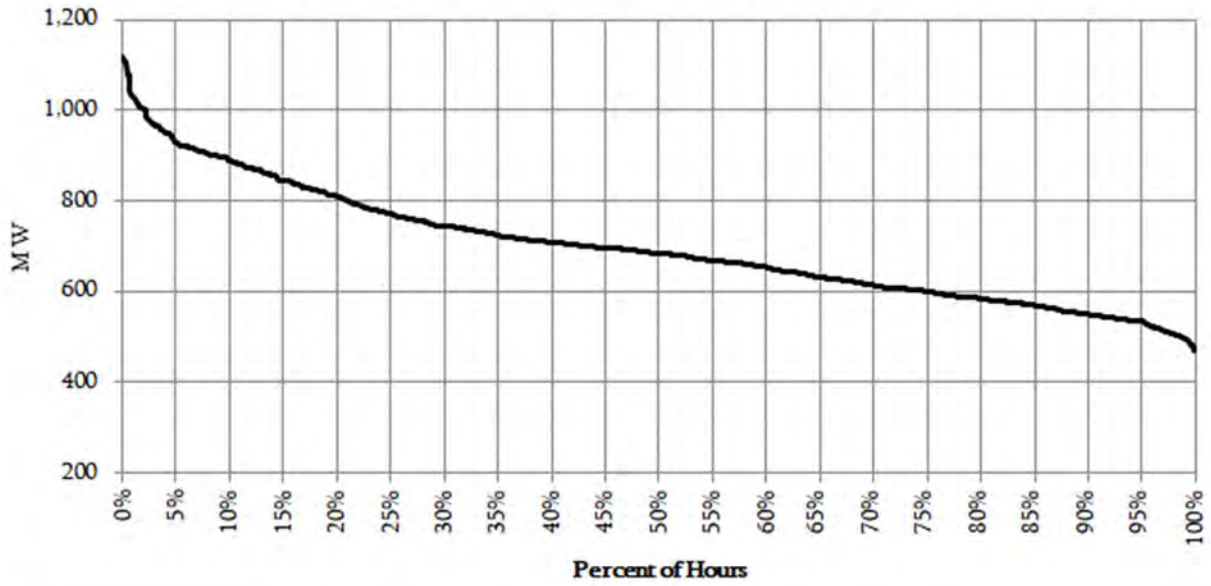
### IMPA Load Duration Curve - Jul



### IMPA Load Duration Curve - Aug



### IMPA Load Duration Curve - Sep

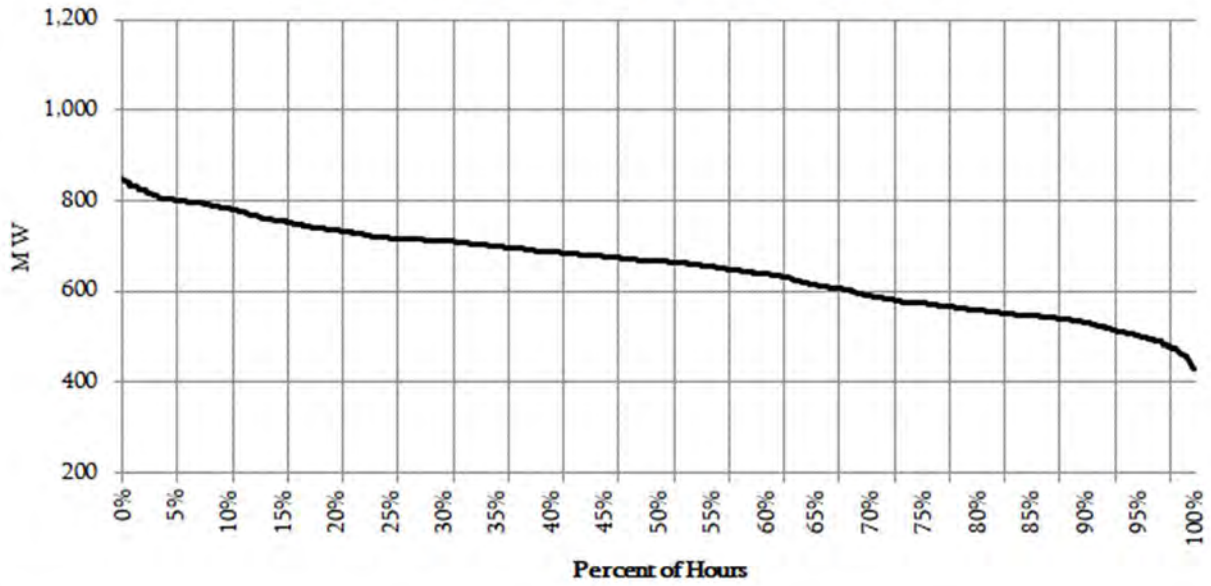


### IMPA Load Duration Curve - Oct





### IMPA Load Duration Curve - Nov

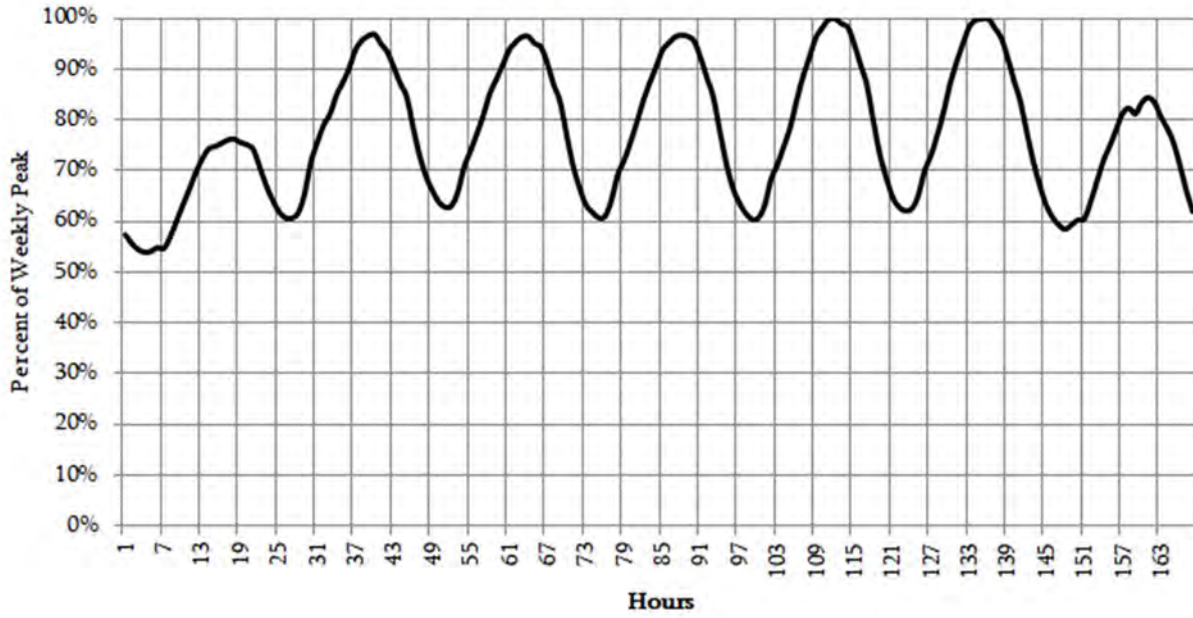


### IMPA Load Duration Curve - Dec

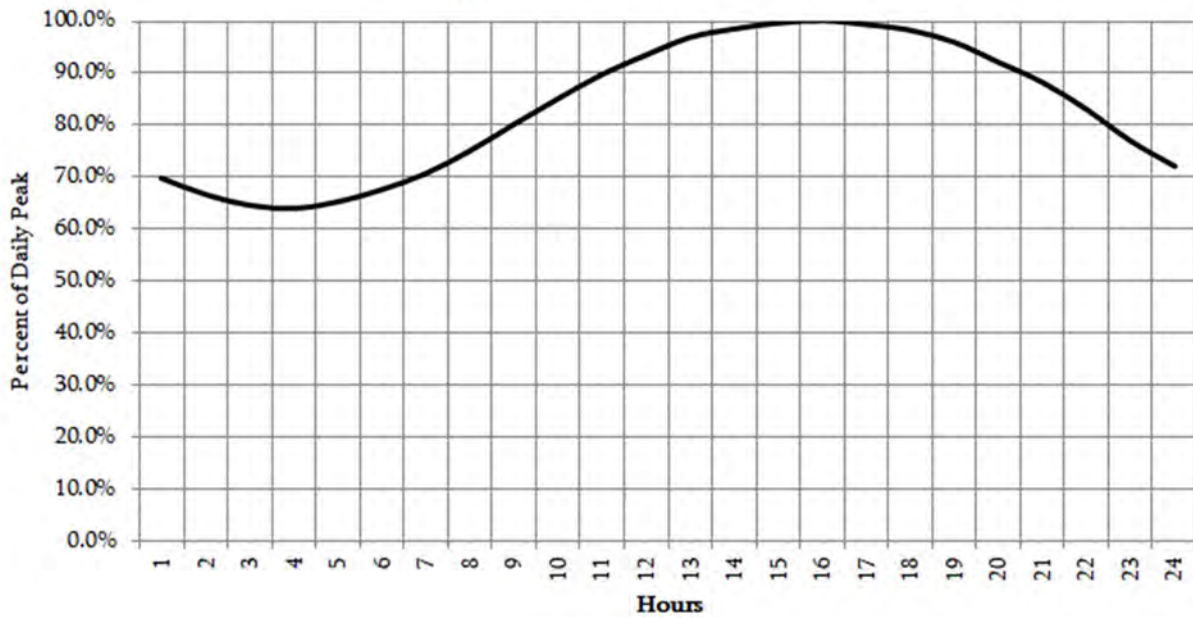


# Summer Load Curves

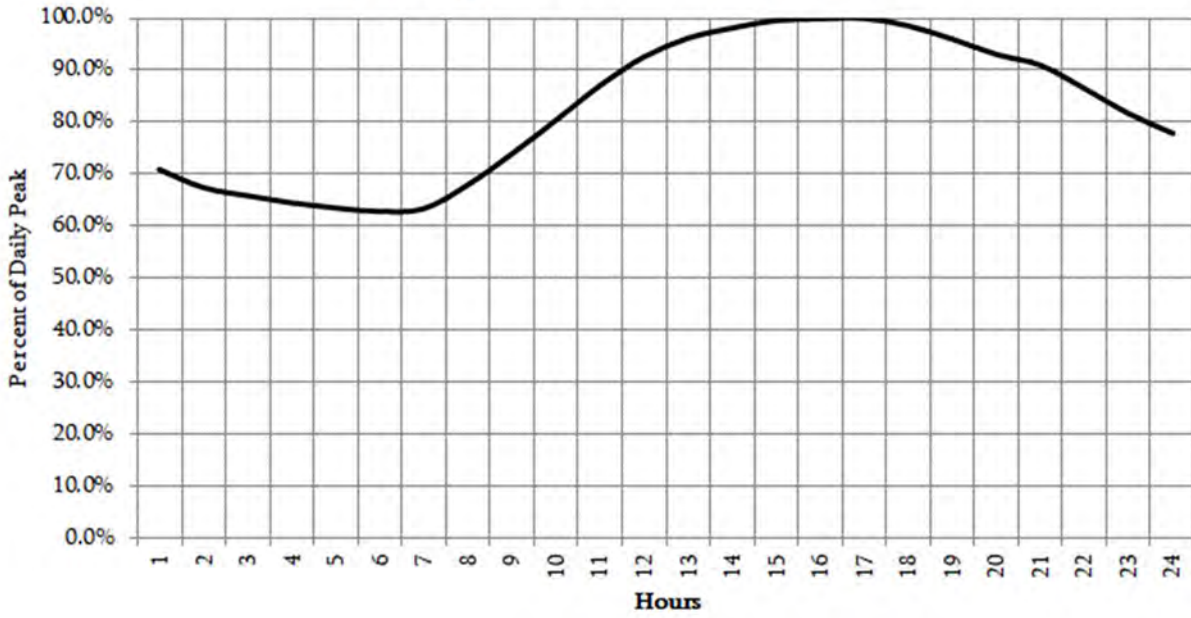
### IMPA Typical Summer Week



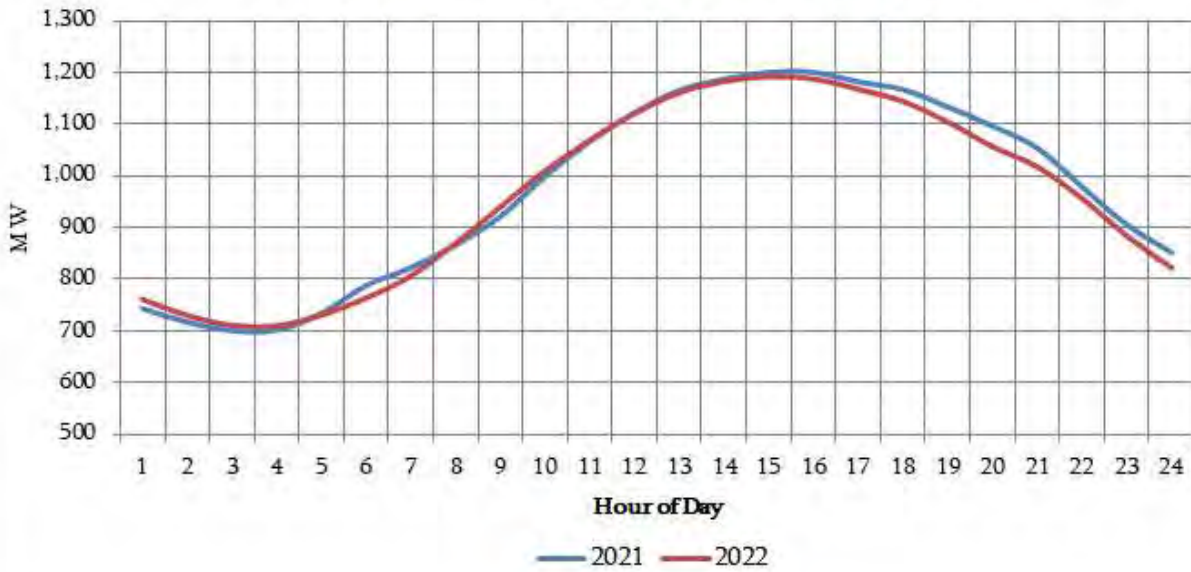
### IMPA Typical Summer Weekday



### IMPA Typical Summer Weekend

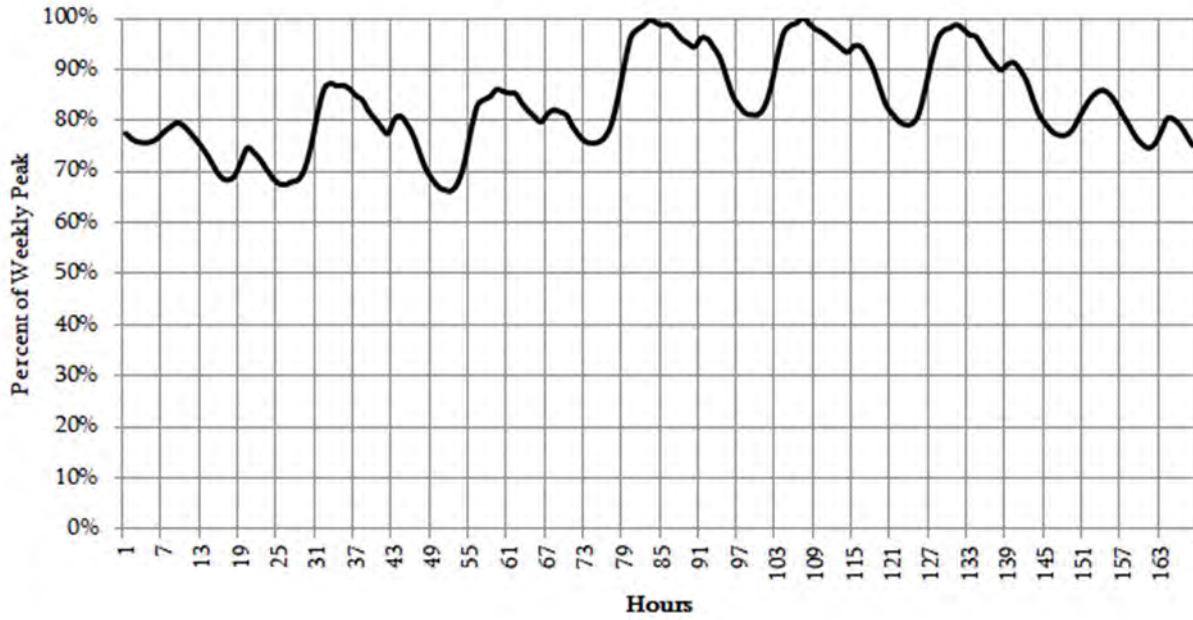


### IMPA Summer Peak Day Load Shapes

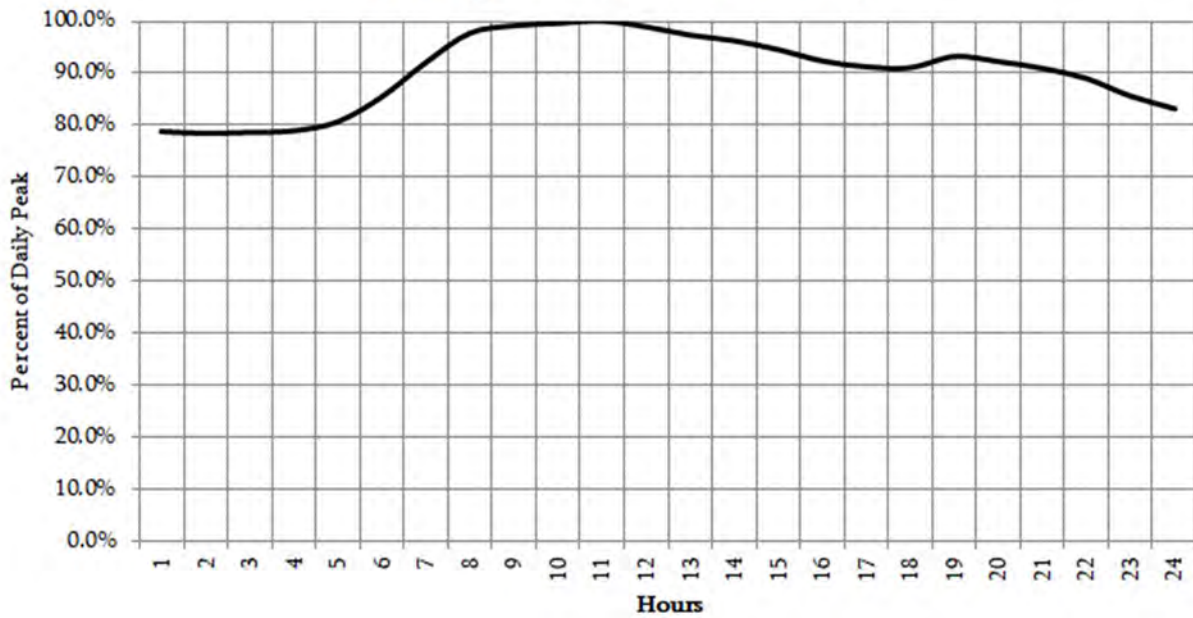


# Winter Load Curves

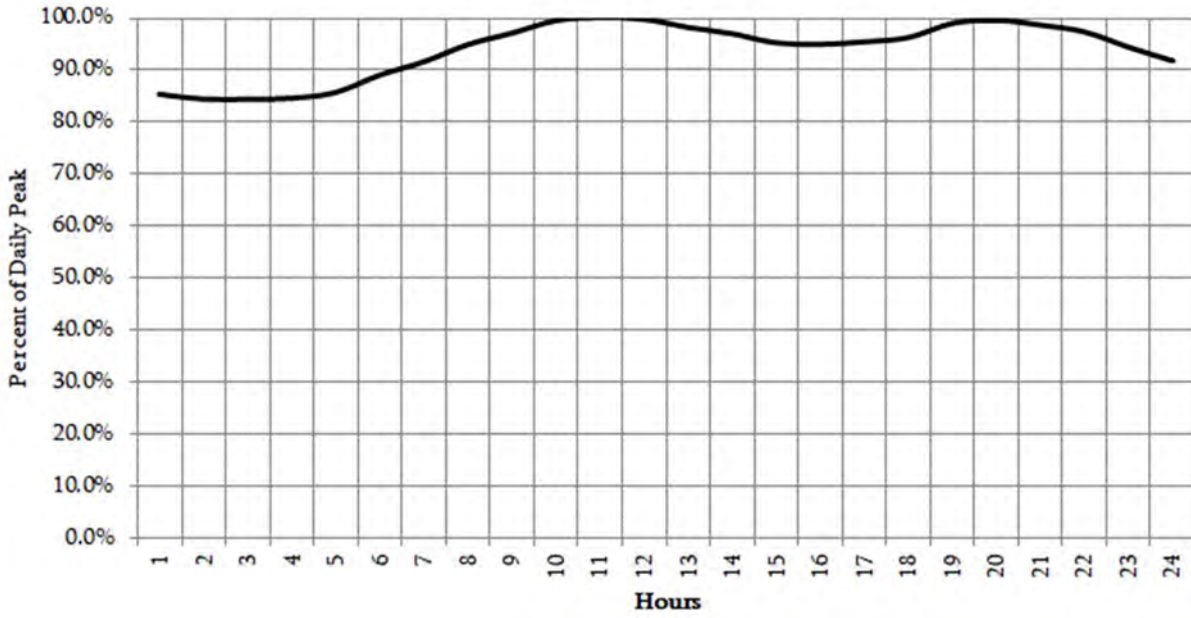
### IMPA Typical Winter Week



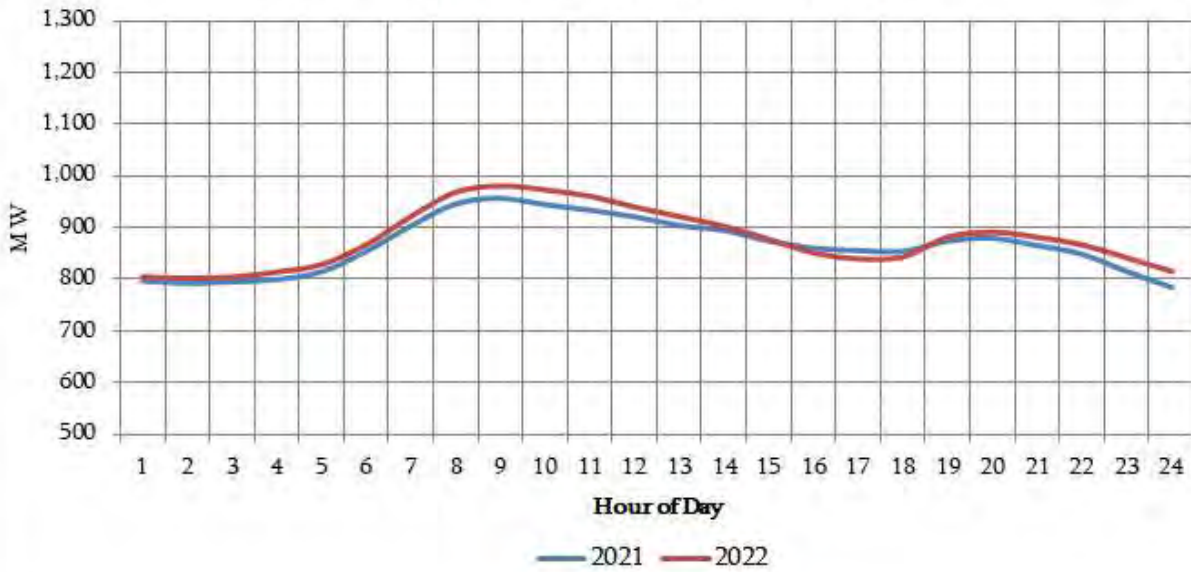
### IMPA Typical Winter Weekday



### IMPA Typical Winter Weekend



### IMPA Winter Peak Day Load Shapes



## **Appendix C1 – Hourly Market Prices – Indiana Hub**

















**Indiana Municipal Power Agency  
IND Hub Hourly Prices - 2022**

<u>Day</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>
12/10/2022	\$ 127.47	\$ 167.05	\$ 38.22	\$ 49.36	\$ 84.99	\$ 141.05	\$ 33.96	\$ 40.32	\$ 124.29	\$ 133.40	\$ 86.52	\$ 125.09	\$ 62.90	\$ 59.20	\$ 49.63	\$ 51.55	\$ 51.88	\$ 51.79	\$ 53.49	\$ 46.66	\$ 58.67	\$ 62.48	\$ 46.32	\$ 41.03
12/11/2022	\$ 47.09	\$ 42.46	\$ 38.81	\$ 40.27	\$ 39.63	\$ 48.19	\$ 37.21	\$ 54.25	\$ 38.31	\$ 45.83	\$ 54.10	\$ 44.30	\$ 47.28	\$ 48.51	\$ 47.82	\$ 48.44	\$ 215.44	\$ 54.10	\$ 61.06	\$ 55.18	\$ 56.38	\$ 48.33	\$ 54.82	\$ 39.18
12/12/2022	\$ 39.43	\$ 43.72	\$ 54.50	\$ 36.83	\$ 41.20	\$ 44.56	\$ 51.74	\$ 60.55	\$ 58.55	\$ 63.40	\$ 91.96	\$ 94.14	\$ 130.49	\$ 68.58	\$ 59.95	\$ 75.47	\$ 86.71	\$ 78.07	\$ 82.73	\$ 64.18	\$ 257.18	\$ 101.79	\$ 53.38	\$ 43.20
12/13/2022	\$ 173.54	\$ 137.82	\$ 81.22	\$ 79.56	\$ 44.46	\$ 51.29	\$ 56.50	\$ 86.68	\$ 122.88	\$ 110.84	\$ 48.69	\$ 65.66	\$ 49.49	\$ 47.87	\$ 45.23	\$ 49.46	\$ 61.43	\$ 65.35	\$ 60.70	\$ 60.86	\$ 61.81	\$ 60.78	\$ 56.85	\$ 51.29
12/14/2022	\$ 46.80	\$ 49.52	\$ 43.70	\$ 42.49	\$ 39.85	\$ 36.59	\$ 51.80	\$ 42.63	\$ 76.93	\$ 50.59	\$ 43.39	\$ 45.71	\$ 47.85	\$ 53.23	\$ 49.06	\$ 51.86	\$ 53.33	\$ 52.31	\$ 51.21	\$ 56.66	\$ 68.54	\$ 45.29	\$ 46.21	\$ 45.91
12/15/2022	\$ 44.79	\$ 42.56	\$ 45.68	\$ 44.55	\$ 42.29	\$ 45.44	\$ 53.23	\$ 61.77	\$ 95.23	\$ 51.97	\$ 46.07	\$ 50.36	\$ 47.40	\$ 48.82	\$ 51.68	\$ 51.46	\$ 55.88	\$ 53.89	\$ 47.18	\$ 48.64	\$ 58.57	\$ 68.75	\$ 48.73	\$ 49.81
12/16/2022	\$ 48.28	\$ 43.24	\$ 44.16	\$ 36.81	\$ 37.78	\$ 36.06	\$ 41.15	\$ 47.12	\$ 66.25	\$ 64.59	\$ 53.25	\$ 53.81	\$ 46.06	\$ 50.97	\$ 50.32	\$ 46.07	\$ 47.48	\$ 48.80	\$ 46.43	\$ 41.79	\$ 41.27	\$ 47.75	\$ 51.63	\$ 58.80
12/17/2022	\$ 83.06	\$ 60.99	\$ 59.21	\$ 51.62	\$ 50.57	\$ 47.71	\$ 44.98	\$ 43.05	\$ 53.10	\$ 63.63	\$ 57.77	\$ 57.76	\$ 51.56	\$ 46.87	\$ 51.58	\$ 52.13	\$ 55.74	\$ 52.79	\$ 54.49	\$ 62.58	\$ 51.75	\$ 68.88	\$ 57.50	\$ 48.63
12/18/2022	\$ 49.22	\$ 49.65	\$ 45.76	\$ 49.88	\$ 53.87	\$ 45.77	\$ 53.33	\$ 58.18	\$ 62.81	\$ 60.28	\$ 60.75	\$ 58.77	\$ 59.95	\$ 58.28	\$ 51.47	\$ 56.80	\$ 61.37	\$ 77.19	\$ 71.37	\$ 69.45	\$ 68.81	\$ 68.37	\$ 79.32	\$ 65.88
12/19/2022	\$ 65.09	\$ 60.73	\$ 56.29	\$ 48.96	\$ 47.83	\$ 58.01	\$ 71.19	\$ 67.08	\$ 72.57	\$ 138.29	\$ 79.83	\$ 145.08	\$ 97.87	\$ 137.11	\$ 102.57	\$ 71.01	\$ 75.27	\$ 73.09	\$ 70.34	\$ 60.99	\$ 63.34	\$ 60.29	\$ 75.18	\$ 57.24
12/20/2022	\$ 55.57	\$ 50.91	\$ 58.06	\$ 56.08	\$ 55.52	\$ 65.24	\$ 66.23	\$ 67.06	\$ 73.56	\$ 61.13	\$ 58.82	\$ 61.14	\$ 57.58	\$ 52.22	\$ 48.67	\$ 53.22	\$ 56.05	\$ 68.51	\$ 71.14	\$ 73.35	\$ 67.99	\$ 68.01	\$ 76.33	\$ 84.77
12/21/2022	\$ 208.52	\$ 63.46	\$ 82.38	\$ 68.99	\$ 61.04	\$ 56.39	\$ 87.15	\$ 77.08	\$ 81.70	\$ 71.23	\$ 67.63	\$ 52.66	\$ 57.15	\$ 45.41	\$ 66.13	\$ 52.38	\$ 62.96	\$ 77.47	\$ 66.25	\$ 59.29	\$ 48.38	\$ 45.61	\$ 43.23	\$ 35.79
12/22/2022	\$ 31.23	\$ 27.84	\$ 24.33	\$ 23.57	\$ 28.00	\$ 28.94	\$ 33.25	\$ 33.45	\$ 35.45	\$ 38.46	\$ 45.64	\$ 47.75	\$ 41.89	\$ 41.28	\$ 39.70	\$ 40.51	\$ 40.58	\$ 43.97	\$ 47.26	\$ 45.65	\$ 51.92	\$ 50.33	\$ 50.47	\$ 77.81
12/23/2022	\$ 91.57	\$ 103.59	\$ 99.76	\$ 123.83	\$ 143.37	\$ 186.44	\$ 270.19	\$ 308.63	\$ 1,131.27	\$ 483.25	\$ 547.93	\$ 560.45	\$ 658.32	\$ 395.04	\$ 222.58	\$ 509.37	\$ 2,345.41	\$ 2,411.71	\$ 1,935.47	\$ 977.56	\$ 1,050.47	\$ 974.86	\$ 819.36	\$ 509.66
12/24/2022	\$ 402.74	\$ 694.46	\$ 577.27	\$ 552.79	\$ 749.69	\$ 620.66	\$ 629.91	\$ 732.20	\$ 1,096.28	\$ 642.61	\$ 695.73	\$ 651.29	\$ 574.36	\$ 162.53	\$ 126.15	\$ 113.92	\$ 266.52	\$ 265.71	\$ 115.36	\$ 130.73	\$ 228.35	\$ 118.39	\$ 396.03	\$ 102.85
12/25/2022	\$ 114.54	\$ 108.14	\$ 85.65	\$ 132.46	\$ 163.37	\$ 83.54	\$ 102.09	\$ 215.31	\$ 198.76	\$ 102.84	\$ 85.63	\$ 125.43	\$ 54.19	\$ 45.55	\$ 38.67	\$ 35.55	\$ 61.75	\$ 84.56	\$ 73.33	\$ 57.73	\$ 67.26	\$ 83.43	\$ 109.05	\$ 79.18
12/26/2022	\$ 112.85	\$ 97.51	\$ 142.66	\$ 118.56	\$ 97.53	\$ 99.30	\$ 100.97	\$ 99.84	\$ 98.92	\$ 103.11	\$ 101.03	\$ 120.56	\$ 95.09	\$ 224.78	\$ 94.34	\$ 117.56	\$ 119.05	\$ 161.95	\$ 143.53	\$ 109.74	\$ 121.90	\$ 86.19	\$ 93.49	\$ 147.61
12/27/2022	\$ 147.63	\$ 215.10	\$ 140.88	\$ 108.78	\$ 80.65	\$ 73.20	\$ 78.04	\$ 137.87	\$ 88.30	\$ 76.29	\$ 65.74	\$ 76.57	\$ 67.95	\$ 57.40	\$ 60.48	\$ 63.71	\$ 105.40	\$ 180.07	\$ 89.42	\$ 61.88	\$ 57.67	\$ 66.73	\$ 56.64	\$ 49.27
12/28/2022	\$ 71.64	\$ 73.48	\$ 69.35	\$ 91.71	\$ 68.24	\$ 58.61	\$ 80.41	\$ 55.52	\$ 60.13	\$ 49.84	\$ 41.72	\$ 37.46	\$ 38.52	\$ 38.78	\$ 35.54	\$ 30.82	\$ 33.08	\$ 39.95	\$ 38.33	\$ 37.58	\$ 34.02	\$ 32.28	\$ 33.13	\$ 33.99
12/29/2022	\$ 25.42	\$ 26.41	\$ 23.08	\$ 25.65	\$ 24.79	\$ 25.05	\$ 30.96	\$ 33.92	\$ 37.81	\$ 34.42	\$ 31.06	\$ 30.28	\$ 31.87	\$ 28.86	\$ 28.98	\$ 28.19	\$ 28.24	\$ 29.48	\$ 30.59	\$ 28.60	\$ 24.62	\$ 22.90	\$ 20.22	\$ 24.60
12/30/2022	\$ 23.36	\$ 23.03	\$ 20.07	\$ 24.10	\$ 24.03	\$ 25.11	\$ 26.51	\$ 28.06	\$ 34.19	\$ 33.33	\$ 31.59	\$ 33.68	\$ 33.09	\$ 32.93	\$ 32.18	\$ 32.37	\$ 31.77	\$ 31.55	\$ 34.89	\$ 29.94	\$ 28.58	\$ 26.62	\$ 25.14	\$ 25.48
12/31/2022	\$ 26.37	\$ 26.77	\$ 27.46	\$ 28.17	\$ 21.19	\$ 22.24	\$ 23.20	\$ 25.43	\$ 24.97	\$ 25.44	\$ 26.99	\$ 27.99	\$ 28.72	\$ 29.46	\$ 28.84	\$ 28.11	\$ 32.74	\$ 42.20	\$ 35.66	\$ 29.09	\$ 26.09	\$ 25.65	\$ 24.41	\$ 24.16



## **Appendix C2 – Hourly Market Prices – AD Hub**

















**Indiana Municipal Power Agency  
AD Hub Hourly Prices - 2022**

<u>Day</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>
12/10/2022	\$ 47.64	\$ 48.64	\$ 46.61	\$ 43.52	\$ 52.49	\$ 47.80	\$ 43.70	\$ 48.27	\$ 49.47	\$ 62.87	\$ 141.69	\$ 50.46	\$ 56.24	\$ 59.34	\$ 54.22	\$ 52.02	\$ 49.34	\$ 61.62	\$ 50.93	\$ 47.46	\$ 46.80	\$ 50.50	\$ 45.31	\$ 42.33
12/11/2022	\$ 40.10	\$ 40.95	\$ 41.23	\$ 40.64	\$ 38.76	\$ 39.57	\$ 37.16	\$ 39.03	\$ 43.95	\$ 119.60	\$ 48.77	\$ 50.94	\$ 47.53	\$ 48.39	\$ 48.08	\$ 52.84	\$ 52.08	\$ 68.52	\$ 77.90	\$ 74.50	\$ 69.15	\$ 62.45	\$ 62.59	\$ 49.23
12/12/2022	\$ 46.40	\$ 53.08	\$ 47.27	\$ 51.99	\$ 44.08	\$ 42.20	\$ 70.64	\$ 73.67	\$ 91.20	\$ 68.76	\$ 85.25	\$ 92.79	\$ 68.38	\$ 93.21	\$ 60.02	\$ 70.62	\$ 115.54	\$ 207.35	\$ 74.62	\$ 75.26	\$ 97.58	\$ 70.07	\$ 61.56	\$ 59.74
12/13/2022	\$ 70.71	\$ 63.92	\$ 62.22	\$ 60.48	\$ 71.81	\$ 51.52	\$ 121.44	\$ 96.76	\$ 86.28	\$ 83.66	\$ 131.41	\$ 91.50	\$ 73.73	\$ 65.63	\$ 63.42	\$ 66.29	\$ 70.92	\$ 74.24	\$ 61.71	\$ 71.44	\$ 80.12	\$ 66.57	\$ 71.72	\$ 65.69
12/14/2022	\$ 73.54	\$ 71.83	\$ 70.25	\$ 74.97	\$ 92.49	\$ 65.78	\$ 70.88	\$ 70.45	\$ 70.30	\$ 74.10	\$ 84.44	\$ 80.92	\$ 70.29	\$ 83.64	\$ 75.78	\$ 68.80	\$ 68.29	\$ 82.04	\$ 74.28	\$ 66.02	\$ 63.77	\$ 66.50	\$ 60.76	\$ 50.79
12/15/2022	\$ 53.88	\$ 56.86	\$ 54.29	\$ 51.97	\$ 69.09	\$ 70.61	\$ 69.96	\$ 70.92	\$ 79.33	\$ 104.90	\$ 89.86	\$ 80.68	\$ 67.32	\$ 110.88	\$ 74.88	\$ 59.86	\$ 58.65	\$ 64.70	\$ 64.49	\$ 58.45	\$ 64.22	\$ 51.50	\$ 49.86	\$ 46.37
12/16/2022	\$ 47.74	\$ 47.38	\$ 54.66	\$ 53.33	\$ 60.19	\$ 72.37	\$ 85.17	\$ 68.10	\$ 60.46	\$ 55.30	\$ 62.52	\$ 56.54	\$ 59.60	\$ 57.06	\$ 55.09	\$ 59.16	\$ 59.36	\$ 65.11	\$ 58.16	\$ 59.03	\$ 57.07	\$ 53.33	\$ 53.87	\$ 52.90
12/17/2022	\$ 59.28	\$ 53.14	\$ 52.05	\$ 50.22	\$ 45.71	\$ 48.21	\$ 50.49	\$ 59.09	\$ 54.83	\$ 49.02	\$ 55.86	\$ 54.67	\$ 53.69	\$ 53.98	\$ 50.71	\$ 53.46	\$ 72.93	\$ 68.29	\$ 63.11	\$ 57.98	\$ 59.55	\$ 65.97	\$ 58.25	\$ 49.73
12/18/2022	\$ 48.75	\$ 51.49	\$ 50.29	\$ 49.78	\$ 45.54	\$ 46.24	\$ 48.92	\$ 67.89	\$ 56.05	\$ 52.15	\$ 54.58	\$ 62.05	\$ 62.78	\$ 56.46	\$ 51.37	\$ 46.42	\$ 66.13	\$ 77.27	\$ 75.80	\$ 75.24	\$ 64.60	\$ 74.93	\$ 77.50	\$ 65.06
12/19/2022	\$ 70.77	\$ 54.49	\$ 67.90	\$ 64.59	\$ 66.38	\$ 69.92	\$ 95.52	\$ 128.98	\$ 98.69	\$ 76.18	\$ 93.51	\$ 99.32	\$ 91.89	\$ 85.11	\$ 96.14	\$ 72.23	\$ 76.55	\$ 103.61	\$ 80.99	\$ 90.15	\$ 71.96	\$ 72.87	\$ 69.59	\$ 63.91
12/20/2022	\$ 43.22	\$ 41.58	\$ 58.54	\$ 57.44	\$ 70.43	\$ 69.85	\$ 90.11	\$ 121.65	\$ 80.03	\$ 69.02	\$ 59.02	\$ 58.83	\$ 54.17	\$ 53.41	\$ 54.06	\$ 51.78	\$ 58.87	\$ 105.24	\$ 86.64	\$ 73.99	\$ 73.47	\$ 81.31	\$ 64.00	\$ 60.31
12/21/2022	\$ 58.36	\$ 65.01	\$ 62.39	\$ 62.24	\$ 61.38	\$ 59.95	\$ 71.81	\$ 97.11	\$ 71.72	\$ 61.56	\$ 52.15	\$ 48.62	\$ 47.26	\$ 49.40	\$ 44.80	\$ 46.73	\$ 48.02	\$ 62.89	\$ 64.02	\$ 50.03	\$ 49.30	\$ 46.98	\$ 42.40	\$ 36.58
12/22/2022	\$ 42.98	\$ 41.95	\$ 43.30	\$ 39.07	\$ 36.58	\$ 40.40	\$ 44.62	\$ 49.24	\$ 48.09	\$ 50.62	\$ 55.39	\$ 49.84	\$ 55.69	\$ 53.18	\$ 48.65	\$ 42.45	\$ 41.89	\$ 47.80	\$ 47.44	\$ 46.89	\$ 41.93	\$ 44.92	\$ 43.82	\$ 37.49
12/23/2022	\$ 36.47	\$ 34.12	\$ 32.39	\$ 32.34	\$ 59.54	\$ 67.46	\$ 87.16	\$ 203.53	\$ 98.00	\$ 228.13	\$ 415.86	\$ 197.12	\$ 615.41	\$ 226.64	\$ 255.51	\$ 486.07	\$ 1,158.43	\$ 3,873.90	\$ 2,196.92	\$ 2,711.41	\$ 2,256.25	\$ 2,243.45	\$ 682.13	\$ 503.97
12/24/2022	\$ 1,848.88	\$ 1,125.13	\$ 2,486.67	\$ 2,798.51	\$ 3,223.00	\$ 2,527.36	\$ 1,051.40	\$ 1,618.88	\$ 1,791.51	\$ 1,243.51	\$ 931.82	\$ 813.85	\$ 473.51	\$ 199.63	\$ 166.13	\$ 256.51	\$ 486.06	\$ 352.50	\$ 160.17	\$ 133.36	\$ 131.92	\$ 197.05	\$ 221.34	\$ 182.57
12/25/2022	\$ 175.32	\$ 113.30	\$ 97.11	\$ 83.56	\$ 99.35	\$ 72.73	\$ 103.96	\$ 158.12	\$ 121.06	\$ 88.54	\$ 72.28	\$ 51.45	\$ 56.17	\$ 40.96	\$ 40.71	\$ 74.38	\$ 94.56	\$ 89.24	\$ 72.29	\$ 88.40	\$ 113.43	\$ 186.52	\$ 98.08	\$ 160.54
12/26/2022	\$ 493.51	\$ 159.97	\$ 100.55	\$ 107.37	\$ 105.43	\$ 115.28	\$ 120.35	\$ 166.56	\$ 142.65	\$ 114.99	\$ 82.93	\$ 154.13	\$ 116.65	\$ 136.37	\$ 142.36	\$ 139.39	\$ 164.21	\$ 135.57	\$ 112.23	\$ 134.45	\$ 178.05	\$ 146.44	\$ 145.42	\$ 63.47
12/27/2022	\$ 106.73	\$ 72.02	\$ 72.58	\$ 80.04	\$ 55.91	\$ 67.74	\$ 76.76	\$ 131.65	\$ 107.82	\$ 86.65	\$ 71.81	\$ 79.59	\$ 64.23	\$ 59.49	\$ 65.37	\$ 55.80	\$ 73.55	\$ 79.50	\$ 69.71	\$ 75.04	\$ 65.62	\$ 53.94	\$ 70.82	\$ 75.85
12/28/2022	\$ 86.89	\$ 63.79	\$ 72.96	\$ 71.28	\$ 71.03	\$ 57.54	\$ 61.10	\$ 68.62	\$ 56.58	\$ 55.43	\$ 44.07	\$ 36.59	\$ 37.85	\$ 44.82	\$ 34.40	\$ 38.22	\$ 38.02	\$ 47.29	\$ 50.63	\$ 43.30	\$ 39.67	\$ 39.11	\$ 39.31	\$ 36.06
12/29/2022	\$ 39.63	\$ 36.65	\$ 35.10	\$ 33.08	\$ 36.41	\$ 40.37	\$ 42.53	\$ 46.00	\$ 38.65	\$ 35.01	\$ 27.03	\$ 31.97	\$ 27.72	\$ 26.77	\$ 27.01	\$ 29.95	\$ 30.29	\$ 35.77	\$ 32.55	\$ 31.22	\$ 28.52	\$ 26.49	\$ 26.28	\$ 25.54
12/30/2022	\$ 26.77	\$ 25.28	\$ 24.78	\$ 25.28	\$ 25.73	\$ 26.97	\$ 31.62	\$ 33.76	\$ 31.98	\$ 30.50	\$ 31.31	\$ 24.31	\$ 26.80	\$ 25.87	\$ 35.37	\$ 31.36	\$ 27.29	\$ 30.46	\$ 32.64	\$ 29.42	\$ 27.83	\$ 25.84	\$ 26.95	\$ 36.25
12/31/2022	\$ 36.25	\$ 26.52	\$ 21.46	\$ 21.41	\$ 21.68	\$ 21.85	\$ 22.62	\$ 21.03	\$ 22.99	\$ 26.43	\$ 35.45	\$ 42.72	\$ 33.92	\$ 33.08	\$ 32.18	\$ 30.49	\$ 30.20	\$ 29.71	\$ 31.32	\$ 30.78	\$ 25.54	\$ 22.74	\$ 21.64	\$ 22.86

## **Appendix D1 – Existing Resource Data – Summary**

**Indiana Municipal Power Agency  
Summary of Existing Generating Resources**

Plant Name	Unit	State	In Service Year	Prime Mover	Primary Fuel	Secondary Fuel	Summer Rating (MW)	Winter Rating (MW)	Current Environmental Controls	Comments
Gibson (*)	5	IN	1982	ST	Coal	-	154.7	156.0	D-ESP, FGD, LNB, SCR, CP	MW Rating Represents IMPA's 24.95% Share of Unit
Trimble County	1	KY	1990	ST	Coal	-	63.5	66.0	CT, D-ESP, FGD, LNB, SCR	MW Rating Represents IMPA's 12.88% Share of Unit
Trimble County	2	KY	2011	ST	Coal	-	94.8	96.0	BH, CT, D-ESP, FGD, LNB, SCR, W-ESP	MW Rating Represents IMPA's 12.88% Share of Unit
Prairie State	1	IL	2012	ST	Coal	-	103.0	103.0	CT, D-ESP, FGD, LNB, SCR, W-ESP	MW Rating Represents IMPA's 12.64% Share of Unit
Prairie State	2	IL	2012	ST	Coal	-	102.9	102.9	CT, D-ESP, FGD, LNB, SCR, W-ESP	MW Rating Represents IMPA's 12.64% Share of Unit
Anderson	1	IN	1992	CT	Nat Gas	Oil	35.0	42.0	WI	
Anderson	2	IN	1992	CT	Nat Gas	Oil	35.0	42.0	WI	
Anderson	3	IN	2004	CT	Nat Gas	Oil	75.0	85.0	DLN1, WI	WI - only on oil
Georgetown	2	IN	2000	CT	Nat Gas	-	80.0	85.0	DLN1	DLN1 system (Dry Low Nox bruner)
Georgetown	3	IN	2000	CT	Nat Gas	-	78.0	85.0	DLN1	DLN1 system (Dry Low Nox bruner)
Richmond	1	IN	1992	CT	Nat Gas	Oil	35.0	42.0	WI	
Richmond	2	IN	1992	CT	Nat Gas	Oil	35.0	42.0	WI	
Whitewater Valley	1	IN	1955	ST	Coal	-	30.0	30.0	BH, CT, D-ESP, LNB, NOx	
Whitewater Valley	2	IN	1973	ST	Coal	-	60.0	60.0	BH, CT, D-ESP, LNB, NOx, DSI	
Solar Parks	Multiple	IN	Varies	PV	SUN	-	106.7	106.7		Some parks are IMPA owned and operated, while others are PPA

(\*) - Joint Owners targeted a 5/31/2030 retirement after significant IRP work was completed.

Prime Movers

ST = Steam Turbine  
CT = Combined Cycle  
PV = Photovoltaic

Environmental Controls

BH = Baghouse  
CT = Cooling Tower  
CP = Cooling Pond  
D-ESP = Dry Electrostatic Precipitator  
FGD = SO<sub>2</sub> Scrubber  
LNB = Low-NOx Burners  
SCR = Selective Catalytic Reduction  
W-ESP = Wet Electrostatic Precipitator  
WI = Water Injection  
NOx = Other NOx Reduction  
DLN1 = Dry Low Nox System 1  
DSI = Dry Sorbent Injection

## **Appendix D2 – Existing Resource Data - Detailed**

**Indiana Municipal Power Agency  
Summary of Existing Generating Resources - Operating Characteristics**

Plant Name	Unit	State	Primary Fuel	Secondary Fuel	Summer Rating (MW)	Winter Rating (MW)	Min Load (MW)	Capacity Planning Factor	Heat Rate MMBTu/MWh	Forced Outage Rate	FOM - \$/kW-Yr	VOM - \$/MWh	SO2 Emit - lbs/MMBtu	Nox Emit - lbs/MMBtu	CO2 Emit - lbs/MMBtu	Comments
Gibson	5	IN	Coal	-	154.7	156.0	62.0	0.880	10.9	10.5%	Varies	\$3.28	0.200	0.130	205	
Trimble County	1	KY	Coal	-	63.5	66.0	56.0	0.925	10.6	7.5%	Varies	\$1.46	0.150	0.100	205	
Trimble County	2	KY	Coal	-	94.8	96.0	93.0	0.925	9.4	7.5%	Varies	\$1.62	0.080	0.070	205	
Prairie State	1	IL	Coal	-	103.0	103.0	63.0	0.925	9.5	7.5%	Varies	\$1.98	0.150	0.070	205	
Prairie State	2	IL	Coal	-	102.9	102.9	63.0	0.925	9.5	7.5%	Varies	\$1.87	0.150	0.070	205	
Anderson	1	IN	Nat Gas	Oil	35.0	42.0	33.5	0.940	13.1	6.0%	\$8.945	\$1.45	0.000	0.120	119	
Anderson	2	IN	Nat Gas	Oil	35.0	42.0	33.5	0.940	13.1	6.0%	\$8.945	\$1.45	0.000	0.120	119	
Anderson	3	IN	Nat Gas	Oil	75.0	85.0	72.5	0.960	12.7	4.0%	\$8.945	\$1.45	0.000	0.040	119	
Georgetown	2	IN	Nat Gas	-	80.0	85.0	72.5	0.960	12.5	4.0%	\$17.402	\$4.58	0.000	0.040	119	
Georgetown	3	IN	Nat Gas	-	78.0	85.0	72.5	0.960	12.5	4.0%	\$17.402	\$4.58	0.000	0.040	119	
Richmond	1	IN	Nat Gas	Oil	35.0	42.0	33.5	0.940	13.4	6.0%	\$26.001	\$1.45	0.000	0.120	119	
Richmond	2	IN	Nat Gas	Oil	35.0	42.0	33.5	0.940	13.4	6.0%	\$26.001	\$1.45	0.000	0.120	119	
Whitewater Valley	1	IN	Coal	-	30.0	30.0	15.0	1.126	12.3	11.2%	\$72.800	\$4.93	3.200	0.350	205	
Whitewater Valley	2	IN	Coal	-	60.0	60.0	40.0	1.126	12.0	11.2%	\$72.800	\$4.93	3.200	0.350	205	
Solar	Multiple	IN	SUN	-	106.7	106.7	N/A	0.650	--	--	Varies	--	--	--	--	Some are IMPA operated, some PPA

**Indiana Municipal Power Agency**  
**Fixed O&M - \$/kW-Year**

Resource	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
Gibson #5	\$ 64.58	\$ 106.27	\$ 69.74	\$ 98.19	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Trimble County #1	\$ 67.45	\$ 69.31	\$ 71.04	\$ 72.75	\$ 74.49	\$ 76.28	\$ 78.11	\$ 79.99	\$ 81.91	\$ 83.87	\$ 85.88	\$ 87.95	\$ 90.06	\$ 92.22	\$ 94.43	\$ 96.70	\$ 99.02	\$ 101.39	\$ 103.83	\$ 106.32
Trimble County #2	\$ 54.82	\$ 56.32	\$ 57.73	\$ 59.12	\$ 60.54	\$ 61.99	\$ 63.48	\$ 65.00	\$ 66.56	\$ 68.16	\$ 69.79	\$ 71.47	\$ 73.18	\$ 74.94	\$ 76.74	\$ 78.58	\$ 80.47	\$ 82.40	\$ 84.37	\$ 86.40
Prairie State #1	\$ 94.17	\$ 96.76	\$ 99.17	\$ 101.55	\$ 103.99	\$ 106.49	\$ 109.04	\$ 111.66	\$ 114.34	\$ 117.08	\$ 119.89	\$ 122.77	\$ 125.72	\$ 125.72	\$ 125.72	\$ -	\$ -	\$ -	\$ -	\$ -
Prairie State #2	\$ 94.17	\$ 96.76	\$ 99.17	\$ 101.55	\$ 103.99	\$ 106.49	\$ 109.04	\$ 111.66	\$ 114.34	\$ 117.08	\$ 119.89	\$ 122.77	\$ 125.72	\$ 101.45	\$ 103.88	\$ -	\$ -	\$ -	\$ -	\$ -
Anderson #1	\$ 8.94	\$ 9.19	\$ 9.42	\$ 9.65	\$ 9.88	\$ 10.12	\$ 10.36	\$ 10.61	\$ 10.86	\$ 11.12	\$ 11.39	\$ 11.66	\$ 11.94	\$ 12.23	\$ 12.52	\$ 12.82	\$ 13.13	\$ 13.45	\$ 13.77	\$ 14.10
Anderson #2	\$ 8.94	\$ 9.19	\$ 9.42	\$ 9.65	\$ 9.88	\$ 10.12	\$ 10.36	\$ 10.61	\$ 10.86	\$ 11.12	\$ 11.39	\$ 11.66	\$ 11.94	\$ 12.23	\$ 12.52	\$ 12.82	\$ 13.13	\$ 13.45	\$ 13.77	\$ 14.10
Anderson #3	\$ 8.94	\$ 9.19	\$ 9.42	\$ 9.65	\$ 9.88	\$ 10.12	\$ 10.36	\$ 10.61	\$ 10.86	\$ 11.12	\$ 11.39	\$ 11.66	\$ 11.94	\$ 12.23	\$ 12.52	\$ 12.82	\$ 13.13	\$ 13.45	\$ 13.77	\$ 14.10
Georgetown #2	\$ 17.40	\$ 17.88	\$ 18.33	\$ 18.77	\$ 19.22	\$ 19.68	\$ 20.15	\$ 20.64	\$ 21.13	\$ 21.64	\$ 22.16	\$ 22.69	\$ 23.23	\$ 23.79	\$ 24.36	\$ 24.95	\$ 25.55	\$ 26.16	\$ 26.79	\$ 27.43
Georgetown #3	\$ 17.40	\$ 17.88	\$ 18.33	\$ 18.77	\$ 19.22	\$ 19.68	\$ 20.15	\$ 20.64	\$ 21.13	\$ 21.64	\$ 22.16	\$ 22.69	\$ 23.23	\$ 23.79	\$ 24.36	\$ 24.95	\$ 25.55	\$ 26.16	\$ 26.79	\$ 27.43
Richmond #1	\$ 26.00	\$ 26.72	\$ 27.38	\$ 28.04	\$ 28.71	\$ 29.40	\$ 30.11	\$ 30.83	\$ 31.57	\$ 32.33	\$ 33.11	\$ 33.90	\$ 34.71	\$ 35.55	\$ 36.40	\$ 37.27	\$ 38.17	\$ 39.08	\$ 40.02	\$ 40.98
Richmond #2	\$ 26.00	\$ 26.72	\$ 27.38	\$ 28.04	\$ 28.71	\$ 29.40	\$ 30.11	\$ 30.83	\$ 31.57	\$ 32.33	\$ 33.11	\$ 33.90	\$ 34.71	\$ 35.55	\$ 36.40	\$ 37.27	\$ 38.17	\$ 39.08	\$ 40.02	\$ 40.98
WWVS	\$ 72.80	\$ 74.80	\$ 76.67	\$ 78.51	\$ 80.40	\$ 82.33	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Solar	\$ 30.00	\$ 30.60	\$ 31.21	\$ 31.84	\$ 32.47	\$ 33.12	\$ 33.78	\$ 34.46	\$ 35.15	\$ 35.85	\$ 36.57	\$ 37.30	\$ 38.05	\$ 38.81	\$ 39.58	\$ 40.38	\$ 41.18	\$ 42.01	\$ 42.85	\$ 43.70













**Indiana Municipal Power Agency  
Summary of IMPA Long Term Purchased Power Contracts**

CounterParty	Capacity (MW)	Capacity Planning Factor	Expiration	Comments
NextEra	Varies	1.000	05/31/26	MISO PRC - thru 25/26 - Max 75 MW
AEP	190.0	1.126	05/31/34	7x24, Can increase capacity annually at IMPA's option
Enel	75.0	-	12/31/34	Wind Contract - Alta Farms II - Dewitt County Illinois
Arevon	150.0	Varies by Season	12/31/42	Solar Contract - Ratts 1 Solar - Pike County Indiana

## **Appendix E – Expansion Resource Data**

**Indiana Municipal Power Agency  
Summary of Expansion Resource Alternatives**

Technology	Capacity Block Size - MW	Construc. Costs - \$/kW (\$2022\$)	Construc. Period - Years	Capacity Planning Factor	Heat Rate MMBTu/MWh	Forced Outage Rate	FOM - \$/kW-Yr (\$2022)	VOM - \$/MWh (2022\$)	SO2 Emit - lbs/MMBtu	Nox Emit - lbs/MMBtu	CO2 Emit - lbs/MMBtu	Comments
Nuclear (SMR)	50	\$10,944	10	0.970	N/A	3.0%	\$101.65	\$3.140	0.000	0.000	0	
CC 2x1	50	\$1,237	4	0.960	6.5	4.0%	\$28.60	\$2.070	0.001	0.008	119	
GE Frame 7F.05	239	\$855	4	0.906	9.8	9.4%	\$7.49	\$4.810	0.001	0.020	119	210 Winter, 203 Summer
GE Frame 7F.04	201	\$857	4	0.906	10.0	9.4%	\$7.49	\$4.810	0.001	0.020	119	175 Winter, 160 Summer
GE Frame 7F.03	90	\$1,389	4	0.906	11.3	9.4%	\$7.49	\$4.810	0.001	0.020	119	101 Winter, 73 Summer
20 MW RE	20	\$2,392	4	0.825	8.5	17.5%	\$36.81	\$5.960	0.001	0.030	119	

**Indiana Municipal Power Agency  
Summary of Expansion Resource Alternatives**

Technology	Capacity Block Size - MW	Construc. Costs - \$/kW (\$2022)	Construc. Period - Years	Capacity Planning Factor	Heat Rate MMBTu/MWh	Forced Outage Rate	FOM - \$/kW-Yr (\$2022)	VOM - \$/MWh (\$2022)	SO2 Emit - lbs/MMBtu	Nox Emit - lbs/MMBtu	CO2 Emit - lbs/MMBtu	Comments
Wind - PPA	50	\$0	4	0.150	N/A	0.0%	\$0.00	\$55.000	0.000	0.000	0	No FOR, but modeled at 36-45% CF
Solar - Tracking - PPA	50	\$0	4	Varies by Season	N/A	0.0%	\$0.00	\$77.000	0.000	0.000	0	No FOR, but modeled at 20-25% CF
Battery Storage (unsubsidized)	50	\$1,317	4	0.800	N/A	0.0%	\$26.53	\$0.000	0.000	0.000	0	

**Indiana Municipal Power Agency  
Summary of Expansion Resource Alternatives**

Technology	Capacity Block Size - MW	Construc. Costs - \$/kW (\$2022)	Construc. Period - Years	Capacity Planning Factor	Heat Rate MMBTu/MWh	Forced Outage Rate	FOM - \$/kW-Yr (\$2022)	VOM - \$/MWh (\$2022)	SO2 Emit - lbs/MMBtu	Nox Emit - lbs/MMBtu	CO2 Emit - lbs/MMBtu	Comments
Energy Efficiency Tranche 1	0.25	\$237	1	1.000	N/A	0.0%	\$0.00		0.000	0.000	0	Modeled in .25 MW tranches Modeled in .25 MW tranches, increasing cost for tranches  Modeled as annual program cost of \$700,000 with variable rates of penetration/potential assumed
Energy Efficiency Tranche 2	0.25	\$356	1	1.000	N/A	0.0%	\$0.00		0.000	0.000	0	
Demand Response	2 to 10 MW	\$350	2	1.000	N/A	0.0%	\$0.00	\$77,000	0.000	0.000	0	



## **Appendix F – Avoided Costs**

IMPA's avoided costs are determined by calculating the cost of serving the next increment of load. Avoided costs can be determined for capacity, energy and transmission expense based on the current constructs utilized in the RTOs. The following sections describe the methodology used to determine the avoided costs. The table on the following page represents the annual avoided cost figures.

### **Avoided Capacity Costs**

In the MISO and PJM RTOs, the next increment of capacity will cost the final realized planning year cleared capacity auction price. The underlying cost curve for these auctions is based on the cost of constructing a new combustion turbine however; the final cleared auction price can be affected by many factors, including:

- Load Forecast
- Demand Response
- Market Participant Behavior
- RTO Reserve Requirements

The design of the RTO capacity markets effectively caps the cleared auction price at or slightly above the value of a new CT, a value known as the Cost of New Entry (CONE). Historically, cleared auction prices for IMPA's load zones have been substantially less than the cost of a new CT.

IMPA utilized a blended capacity price approach to formulate capacity avoided costs. These were blended based on observable market quotes for capacity and new resources based on the All-Source RFP. Blending converges to IMPA's cost for a new CT, escalated at inflation.

### **Avoided Energy Costs**

In an LMP energy market, the marginal cost of serving the next increment of load is the LMP. IMPA's avoided energy cost is the projected cost of market energy. The base case market prices are shown on the attached table.

### **Avoided Transmission Capacity Costs**

As in energy, IMPA's avoided cost of transmission is based on the charges applied by the RTO for open access transmission service to serve its member loads in the RTO load zones.

IMPA Avoided Costs				
	Capacity \$/kW-Month	Energy - 5x16 \$/MWh	Energy - WRAP \$/MWh	Transmission \$/kW-Month
2024	\$ 6.996	\$ 54.922	\$ 42.892	\$ 5.334
2025	\$ 6.996	\$ 58.410	\$ 45.311	\$ 5.441
2026	\$ 6.996	\$ 59.770	\$ 46.776	\$ 5.550
2027	\$ 6.950	\$ 60.824	\$ 48.036	\$ 5.661
2028	\$ 6.905	\$ 56.719	\$ 45.258	\$ 5.774
2029	\$ 6.638	\$ 56.009	\$ 44.511	\$ 5.889
2030	\$ 6.660	\$ 52.670	\$ 42.192	\$ 6.007
2031	\$ 6.704	\$ 48.609	\$ 39.098	\$ 6.127
2032	\$ 6.772	\$ 44.933	\$ 36.671	\$ 6.250
2033	\$ 6.839	\$ 42.329	\$ 35.279	\$ 6.375
2034	\$ 6.919	\$ 36.068	\$ 31.956	\$ 6.502
2035	\$ 7.006	\$ 36.581	\$ 32.464	\$ 6.632
2036	\$ 7.106	\$ 36.774	\$ 33.000	\$ 6.765
2037	\$ 7.215	\$ 37.162	\$ 33.940	\$ 6.900
2038	\$ 7.305	\$ 37.815	\$ 34.670	\$ 7.038
2039	\$ 7.402	\$ 38.164	\$ 35.067	\$ 7.179
2040	\$ 7.500	\$ 38.425	\$ 35.166	\$ 7.323
2041	\$ 7.592	\$ 39.295	\$ 36.012	\$ 7.469
2042	\$ 7.700	\$ 40.064	\$ 36.647	\$ 7.619
2043	\$ 7.793	\$ 40.817	\$ 37.363	\$ 7.771

All values are weighted averages of IMPA pricing zones

## **Appendix G1 – 2022 IMPA Annual Report**



**IMPA**

2022 ANNUAL REPORT

40

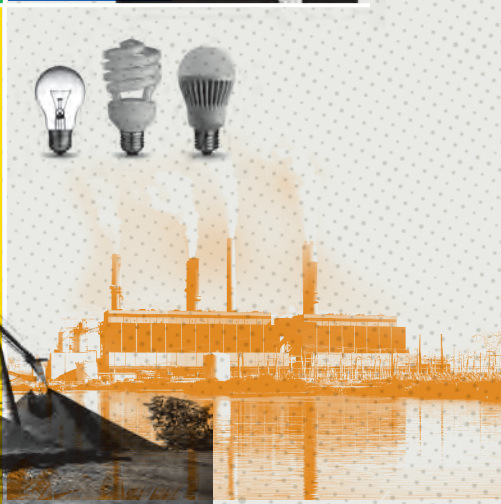
INDIANA MUNICIPAL POWER AGENCY ■ 40 YEARS OF POWER

**CELEBRATING FOUR DECADES  
WITH A BRIGHT FUTURE AHEAD**

# 400



2023 2013 2003 1993 1983



INDIANA MUNICIPAL  
POWER AGENCY

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# MESSAGE TO MEMBERS

# FOUR

**DECADES OF POWER.** When IMPA began operations in 1983, the Agency's founders took a chance in believing that this organization would grow and provide value to its members into the future. Here we stand 40 years later. Our first communities – 26 municipal utilities around the state – placed their faith and future in the Agency's shared vision of supplying an affordable and reliable power supply to their customers. And they did so through 50 year contracts, in hopes that the decisions they made would last well into the future. While their creation and plan proved true, they may not have expected all that we have become in four decades, or where we are headed.

2022 was a year of change for IMPA. Most notably, IMPA's longtime president and CEO Raj Rao retired in April, bringing an end to his 39 year tenure at the Agency. That same month, I stepped into the role of President and CEO of IMPA, now leading the Agency that I have been part of for 30 years, most recently serving as COO. While the individual at the helm of IMPA is different, our focus and vision remain the same as they have been since our founding – low-cost, reliable, environmentally-responsible power.

We took steps in 2022 to build upon the solid foundation that was created for IMPA and to bolster our future. We solidified contract extensions with several member communities to ensure the continued vitality of the Agency. We strengthened our power supply portfolio through our continued addition of solar parks while exploring opportunities to support our future power needs. By year's end, we completed another five solar parks, surpassing 170 megawatts of solar capacity. We weathered the changing economy and sought to protect members' value. While a rate increase was approved for 2023 due to inflationary factors affecting the whole economy, coupled with higher natural gas and coal prices, our increase was much less than other power providers. We added another community to the IMPA Service Corp Dedicated Services program, now providing this pay-for-fee service to 14 members. We expanded services to communities to further support their growth and development. We continue the work begun 40 years ago while adapting and changing to today's situations and opportunities.

Four decades ago, the founders of this Agency gave us the building blocks for a resilient foundation, providing a sturdy base to build toward a future of success. This foundation remains strong, our values remain true, our vision remains focused, and we will work hard to ensure the Agency meets the needs of our municipal electric communities, propelling us forward for another four decades.

**Brent W. Slover** CHAIRMAN OF THE BOARD

**Jack F. Alvey** PRESIDENT & CEO





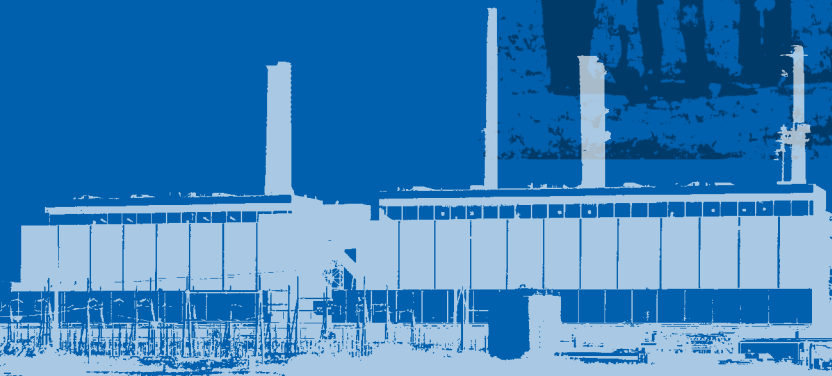


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DECADES OF

# VISION

THE GRANDEST VISIONS  
REQUIRE JUST ONE STEP—  
ONE BUILDING BLOCK—TO  
BEGIN TAKING SHAPE...



# FOUR DECADES OF VISION

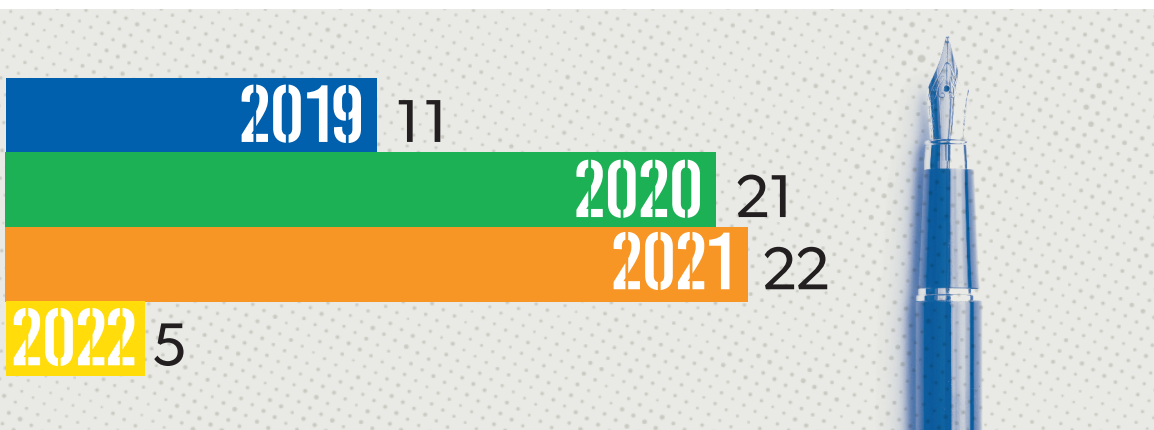
When a small group of 11 municipally owned utilities first began exploring the idea of a joint action agency in the late 1970s, the task seemed quite daunting. How could small communities compete with electric industry giants in providing the power needed to serve their customers at a reasonable cost? Yet even the grandest visions require just one step—one building block—to begin taking shape. Through the determination and perseverance of those dedicated few, the vision of a power agency serving Indiana’s municipal electric utilities became reality. They laid the foundation for the Indiana Municipal Power Agency (IMPA) and its public power communities to grow upon.

That driving vision extended to the Agency’s leadership. While Jesse Tilton, III, served as IMPA’s first President, the man that would lead the Agency through the next three decades would be IMPA’s first Director of Engineering Raj Rao, who became President and CEO in 1986. Under Rao’s guidance, IMPA grew from a small Agency with only \$150 million in assets to a \$2 billion organization serving 61 communities and nearly 350,000 ultimate customers.

While Rao and the founding fathers laid the foundation for IMPA’s success, 2022 saw the next generation of leadership step in to lead the Agency forward. Rao retired after 39 years of service to the Agency in April. Leadership of IMPA was passed on to Jack Alvey, who was appointed by the IMPA Board of Commissioners as the next President and CEO of the Agency. While Alvey was new to the role, he was not new to IMPA, having joined the Agency in 1992 as a combustion turbine operator. During Alvey’s 30 year tenure with IMPA, he played a key role in many of the Agency’s achievements. He oversaw the completion and commissioning of IMPA’s Anderson and Richmond combustion turbines (CTs), as well as the expansion of IMPA’s generation operations with the addition of the Anderson CT3, Trimble County Unit 2, and the Prairie State Energy Campus units. Alvey also managed the Agency’s transmission joint ownership, safety, and environmental and reliability compliance. Alvey’s vision for the future, combined with his significant experience with the Agency and the industry, will serve as a strong foundation for IMPA’s future endeavors.

Vision is what first created IMPA, and vision is what is necessary to sustain IMPA moving forward. The vision of IMPA’s founding fathers in signing 50 year contracts was innovative, yet necessary to garner the stability needed to serve municipal customers in the long-term. As IMPA approached the 40 year mark of those 50 year contracts, the Agency began working with member communities to ensure they would continue to have a reliable power supply in place beyond the initial life of the contracts. In 2022, the Agency was able to secure five contract extensions, bringing the total to 59 out of IMPA’s 61 member communities. These extensions benefit all IMPA members and their customers by providing uniform power supply management and financial stability. Through the contracts, IMPA has the security and backing needed when issuing bonds and seeking long-term financing opportunities. Additionally, the contract extension allows the Agency to spread the cost of financing projects over longer periods of time corresponding with the life of electrical assets, translating to consistency in costs no matter the economic context. The power sales contracts IMPA has with its members create a healthy foundation for the Agency to provide its diversified, robust power supply well into the future. With 97% of IMPA’s member communities signed on, the vision for IMPA’s continued success remains strong.

**AS OF DECEMBER 2022, 59 member communities have extended their contracts to ensure a reliable power supply for the future.**



**AFTER 39 YEARS WITH IMPA**—36 as President and CEO—Raj Rao retired from IMPA in April of 2022. Rao stood at the helm of IMPA since 1986, guiding the Agency for nearly 40 years. Rao’s commitment to public power was the driving force behind IMPA’s decades of success.

To celebrate and honor the indelible mark Rao left upon public power and Indiana’s municipal electric communities, the IMPA Board of Commissioners chose to rename the Agency’s conference center as the IMPA Raj Rao Conference Center in his honor. Rao joined with past and present commissioners and IMPA staff in October 2022 to commemorate the event.

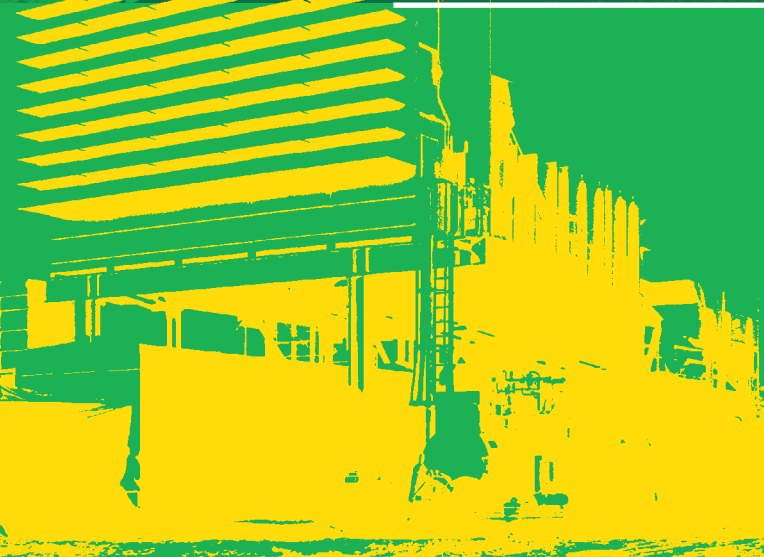




DECADES OF

# GENERATION

DIVERSITY ENSURES THAT NO MATTER THE SITUATION, RESOURCES WILL BE AVAILABLE TO MEET CURRENT AND FUTURE ELECTRIC NEEDS.



## FOUR DECADES OF GENERATION |

In four decades, IMPA has found that a strong foundation also requires balance. While the Agency was built on coal-fired baseload resources, IMPA's portfolio must be comprised of a variety of resources to ensure its long-term viability. Power supply diversity ensures that no matter the situation, resources will be available to meet current and future electric needs.

With IMPA's continued investments in its solar program, along with current and planned investments in long-term renewable power purchase agreements (PPAs), IMPA is working toward a projected energy portfolio made up of 46% no-carbon resources by 2026. As environmental regulations continually change, and as older generation units near their end-of-life expectancy, the shift is a necessity for the Agency's future success. While no one can determine with certainty what the future holds, IMPA continues to build a portfolio that will provide a reliable and environmentally-responsible power supply for another 40 years.

In 2022, IMPA added five additional solar parks to its portfolio in the member communities of Anderson, Bremen, Linton, Peru, and Walkerton. Together, the new parks have the capacity to generate 22.8 megawatts (MW) of power to serve IMPA's membership. The energy generated at each park remains within each community, serving the power needs of local residents, businesses, and industries. Combined with IMPA's previously constructed parks, the Agency had 171.5 MW of solar power online in member communities at the end of the year. IMPA also broke ground on several parks planned for commissioning in 2023 in the communities of Gas City, Knightstown, Ladoga, Middletown, Richmond, and Washington. Once these parks are completed, they will bring an expected 24.7 MW of additional solar power to the Agency's power portfolio.

As the Agency has done in years past, IMPA entered into agreements to build the solar parks on behalf of an investor who can receive the federal investment tax credit. Under the agreements, IMPA continues to operate the solar parks and purchases 100% of the solar parks' production. Through these transactions, IMPA is able to achieve lower cost renewable energy and has the option to purchase the solar parks at the end of six years. In 2022, the Anderson 1 Solar Park was the first to reach its purchase option date, allowing IMPA to repurchase the park from the investment partner and net a 24% cost savings over the original construction cost. With passage of

**WALKERTON SOLAR PARK** *Students from Walkerton Elementary School attended a ribbon cutting ceremony at the Walkerton Solar Park in 2022, where they learned more about how solar works and the benefits of having the park located in their community.*





**MIDDLETOWN SOLAR PARK GROUNDBREAKING** *Middletown community personnel joined with IMPA representatives in September to break ground on the Middletown Solar Park, a 1.35 MW facility expected to be commissioned in 2023.*

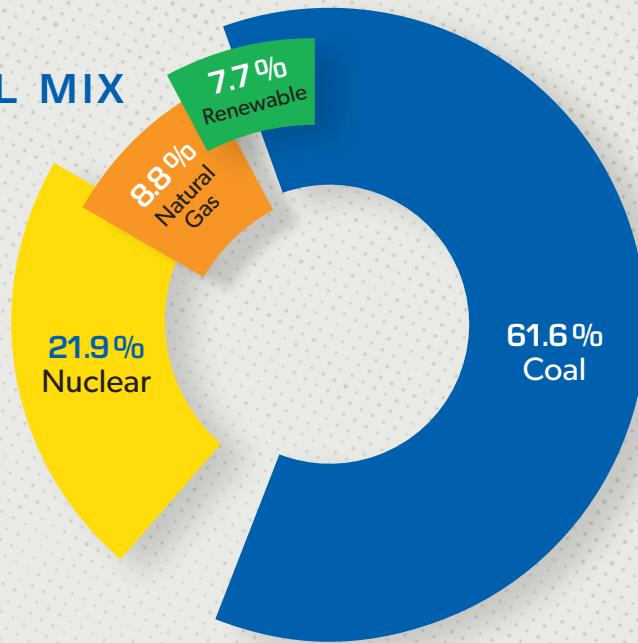
the Inflation Reduction Act (IRA) of 2022, IMPA will have the ability to secure federal investment tax credits directly moving forward. IMPA members with solar parks also receive direct financial benefits from the sites, as the Agency contributes thousands of dollars in property taxes to each community's tax base on an annual basis.

While the construction of solar parks has played an integral role in building the renewable portion of the Agency's portfolio, IMPA has also pursued renewable PPAs to supplement its diverse portfolio. IMPA contracted with Enel Green Power, the project owner and operator of the Alta Farms Wind Project II, for 75 MW of wind power from the facility beginning in the second quarter of 2023. At the end of 2022, the project was fully constructed and awaiting final interconnection, with IMPA's portion of the project expected to produce 263-gigawatt-hours of wind energy annually once online — enough to power over 27,000 homes. Construction on the 200 MW wind project in Dewitt County, Illinois, began in 2021.

Additionally, IMPA entered into a PPA in 2020 for the Ratts 1 Solar Project for 150 MW of solar energy, capacity, and renewable energy credits. The project is expected to be commercially operational in first quarter 2025.

IMPA continues to build upon its historic foundation with wise investments in the Agency's power supply portfolio, ensuring that its members will always have their everchanging electric needs met.

## 2022 FUEL MIX



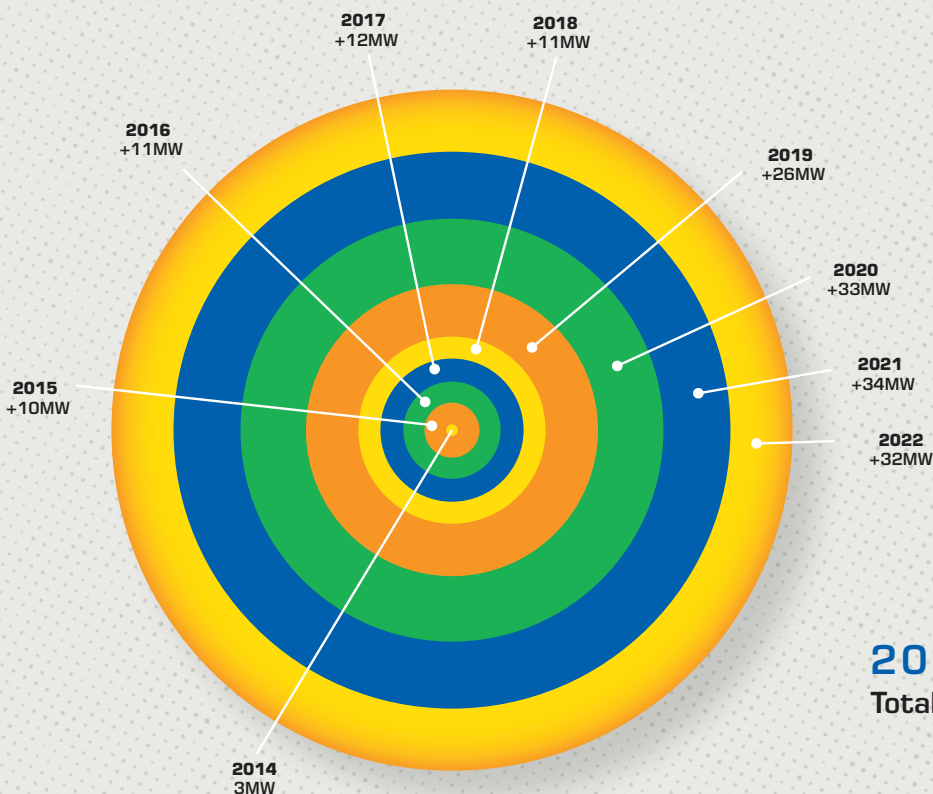
## 2022 RESOURCES

**615 MW** COAL

**419 MW** NATURAL GAS

**321 MW** PURCHASED POWER

**172 MW** SOLAR



**2022 SOLAR**  
Total: 172MW

## FOUR DECADES OF INNOVATION |

Over the past 40 years, IMPA's progress has relied on innovation. While the Agency relies on historical experience to evaluate decisions, IMPA's success is due to its willingness to pivot and explore new opportunities. IMPA's plan to install solar parks in member communities was innovative in 2014, and with the passage of time, technological improvements have led to even more innovative opportunities.

IMPA began repowering solar parks in 2018 after early inverter failures occurred in some of the Agency's first parks. Through the repowering process, inverters and transformers were replaced, with skids being rewired to accommodate the new equipment. With new inverters and modules in place, the Agency's older solar parks can continue generating at the expected capacity levels for years to come. Since 2018, IMPA has repowered eight of the Agency's older parks, including the most recent repowering of the Washington Solar Park in 2022.

IMPA also began installing new data collection systems at its solar parks to enable engineers and technicians to more efficiently monitor park output. The systems not only collect data on the operations of the parks, but alert solar personnel in real time to any performance issues that may occur. The data gathered also allows engineers to develop historical data trends and verify the parks are meeting output expectations. As of December 2022, the data collection systems were installed on all of IMPA's solar parks.

In addition to monitoring the electrical performance of the parks, IMPA's solar personnel also rely on advanced technology to conduct thermal inspections. Drones equipped with infrared cameras capture images that are then analyzed using machine learning software to identify problems in the solar panels. This requires only a couple hours of technician time compared to manually testing the modules, which could take days or weeks depending on the size of the park. By leveraging new technologies, IMPA continues to seek innovation in its operations.

Beyond innovations impacting IMPA directly, the Agency looks for opportunities for communities to seek out their own innovations. With the passage of the Infrastructure Investment and Jobs Act (IIJA) in 2022, funding for various local infrastructure projects through competitive grant and loan opportunities became available. The IIJA, also known as the Bipartisan Infrastructure Law, invests in America's infrastructure by devoting funds to US roads, highways, and bridges, investing in clean drinking water and water infrastructure, ensuring access to high-speed internet, and investing in clean energy technologies and the US energy grid. IMPA devoted staff resources and enlisted the assistance of an outside consultant to provide discounted grant writing services and ensure that all opportunities for municipal utilities were identified. While details continue to emerge, IMPA remains committed to tracking possibilities through the Act and working with members to recognize and access funding opportunities.



4

DECADES OF

# INNOVATION

IMPA'S SUCCESS IS DUE TO ITS WILLINGNESS TO PIVOT AND EXPLORE NEW OPPORTUNITIES.



ELECTRIC  
VEHICLE  
PARKING



4

DECADES OF

# STABILITY & RELIABILITY



STABILITY IN OPERATIONS, STABILITY  
IN SERVICE, AND STABILITY IN  
RATES WORK TOGETHER TO ENSURE  
HEALTHY, GROWING MEMBER  
COMMUNITIES.

## FOUR DECADES OF STABILITY

While IMPA's goal is to provide low-cost, reliable, and environmentally-responsible power, stability is just as key to the success of the Agency and its members. Stability in operations, stability in service, and stability in rates work together to ensure healthy, growing member communities. IMPA's sound decisions throughout decades of operations have traditionally allowed member communities to enjoy lower rates than customers of neighboring utilities in rate comparisons.

With the country still recovering after the impacts of the pandemic, inflation reached historic levels in 2022. Prices for day-to-day essentials like food and gasoline noticeably rose, and the electric industry did not escape unscathed. The cost of generating and delivering energy to the millions of utility customers around the country was steadily increasing, in large part due to increases in fuel costs, labor costs, supply chain issues, US energy policy, and the conflict in Ukraine.

IMPA was not immune to the wider economic issues facing so many others. These factors contributed to the necessity of the Agency's average 8.8% wholesale power rate increase announced for 2023. However, when compared to other power providers that implemented increases in the double digits, the impact felt by IMPA member utilities remained smaller than others. While not ideal, the necessity of enacting the rate increase helps the Agency to ensure the reliable delivery of electricity at a reasonable cost to customers throughout the state. IMPA's ability to remain competitive and below the cost of other power providers in the state is a testament to the Agency's historically effective stewardship and planning of resources and costs, decades of quality leadership, and economies of scale utilized by having a 61-community strong membership.

For decades, IMPA has made fiscal responsibility a top priority, consistently receiving A+ /A1 credit ratings by the three major rating agencies, a sign that IMPA does its part to protect the security of its investments and its member communities. In early August, IMPA issued the 2022 Series A Bonds with a total par amount of approximately \$97.3 million. A portion of the 2022 Series A Bond's proceeds were issued for ongoing system improvements, and a portion of the proceeds were issued to refund IMPA's 2012 Series A Bonds totaling approximately \$20.5 million. The net present value savings from the refunding was approximately \$1.8 million.

IMPA's financial stability has always been a significant component of the bedrock that keeps the Agency strong.

## FOUR DECADES OF RELIABILITY

Reliability has always been at the forefront of IMPA's actions. Without a reliable power supply, the Agency's public power communities cannot serve their residents, businesses cannot sell their products, and factories cannot produce their goods.

In the spring of 2022, the Midcontinent Independent System Operator (MISO), an independent organization that dispatches and delivers power throughout most of Indiana and other parts of the Midwest, announced it may not have enough reserve generation capacity to meet expected peak loads in the summer. While the statement was not indicating that temporary outages were imminent, it did highlight the higher than normal risk depending on the weather and performance of power generating units. It brought to light the challenges faced by the industry in "minding the gap" – filling the holes left by retiring fossil-fueled generation while generation powered by other sources are still being constructed and brought online. While IMPA's members did not experience any situations that required load shed during the summer, IMPA implemented plans to better assess situations and communicate with members as needed, including a messaging and notification system that can quickly and efficiently notify contacts of important information via text, voicemail, or email.



**IMPA'S 2022 MANAGEMENT TEAM** *Larry Brown, Vice President of Rates and Planning; Sarah Shaughnessy, Vice President of Accounting and Controller; Joe Schmidt, Executive Vice President, Electrical Engineering and Generation; Jane Hemmerlein, Vice President of Human Resources; Carolyn Wright, Vice President of Government Relations; Bryan Brackemyre, Vice President of Member Services; Jack Alvey, President and CEO; Chris Rettig, Executive Vice President and CFO; Jeff Vincent, Vice President, Electrical Engineering and ISC General Manager; Kyle Brouillette, Senior Vice President of Market Operations and Planning; Peter Prettyman, Senior Vice President and General Counsel; and Chris Sanders, Vice President of Generation*

When Winter Storm Elliott hit during Christmas 2022 and temperatures around the region dropped, IMPA relied on its resources to notify and support member communities. The freezing temperatures, high winds, and holiday season combined to place stress upon the PJM system, prompting them to call for voluntary load shed. IMPA utilized the notification system to communicate with its member utilities in the PJM territory to encourage voluntary load reduction through conservation efforts. Additionally, IMPA's combustion turbines equipped with liquid fuel backup provided reliable power to the PJM system and delivered value to IMPA's members for the generation provided to the market. IMPA Service Corp's crews of linemen also braved the inclement weather to restore power to several member communities impacted by the storm. Thankfully, Winter Storm Elliott passed without further stress to the transmission system.

As physical attacks and cyberattacks continue to grow in number and frequency, reliability of municipal electric systems has become increasingly important as well. News headlines in 2022 were dominated by the Colonial Pipeline cyberattack, as well as physical attacks on substations on both the east and west coasts. Now more than ever, safeguarding systems was of the utmost importance to reliability of service. IMPA and its member communities sought to enhance the security of their systems through additional training and cybersecurity efforts. While threats will continue to evolve and grow, IMPA hopes to help communities address such concerns and preserve the safety and reliability of municipal electric systems. Just as reliability has been a key focus for IMPA through its history, the Agency will continue to evolve to ensure reliability is safeguarded in future operations.

4

DECADES OF



# SERVICE

AS THE AGENCY AND ITS MEMBERSHIP GREW,  
SO DID THE SERVICES PROVIDED TO PUBLIC  
POWER COMMUNITIES IN THE STATE AND BEYOND.





## LINEMAN APPRECIATION EVENT

On September 28, IMPA held its second annual Linemen Appreciation Event to recognize the dedication of Indiana's public power utility lineworkers. Over 100 community leaders and utility workers from IMPA members joined to celebrate the people who consistently work to provide the essential service of electricity to their friends, families, and neighbors.

The day provided opportunities for linemen and utility personnel to gather in comradery and be celebrated for the impact they have in their communities. Apprentices of all levels were recognized for their commitment, and the recognition concluded with the presentation of the IMPA Kerry Vincent Distinguished Lineworker Award. The Award was created in 2021 to honor the life and legacy of Kerry Vincent, a longtime employee of IMPA and advocate for public power who passed away. The Kerry Vincent Award was established to recognize a lineworker from a member community that embodies the traits Kerry exhibited in his everyday life: Commitment, Compassion, Character, and Community.



**DICK JUSTICE**, Electric Supervisor of Gas City Utilities, was unanimously chosen by the Award Selection Committee and the IMPA Executive Committee to be the 2022 recipient of the award due to his qualifications in each criterion. Justice has served his community in the electric department for over 30 years. His leadership and commitment to his public power community were evident to those in attendance as he accepted the award.

## FOUR DECADES OF SERVICE |

IMPA began as a wholesale power provider, dedicated solely to ensuring municipal electric communities had access to the electricity they needed to serve their communities. However, over the next 40 years, IMPA would become much more than “just” a power provider. As the Agency and its membership grew, so did the services provided to public power communities in the state and beyond. Through additional community support, IMPA assists members in building stronger foundations in their own communities.

During 2022, IMPA’s engineering and operations subsidiary, IMPA Service Corp, expanded its Dedicated Services operations to the community of Thorntown. Joining the 13 other communities that are already part of the program, Thorntown will receive system maintenance, vegetation management, and emergency restoration services on a regular basis, promoting a healthy electric infrastructure and securing more reliable service to customers. Thorntown joins the communities of Advance, Brooklyn, Centerville, Dublin, Dunreith, Frankton, Knightstown, Lewisville, New Ross, Rockville, South Whitley, Spiceland, and Straughn as a member of Dedicated Services.

IMPA Service Corp also extended its Advanced Metering Infrastructure (AMI) program to include the northern Indiana communities of Argos and South Whitley. The AMI program was designed to utilize economies of scale to help IMPA communities realize savings in their efforts to acquire the latest technology in smart metering. Communities who participate in IMPA Service Corp’s AMI program cost share required software, server hosting, and startup training. Argos and South Whitley join the communities of Advance, Bargersville, Blanchester, Coatesville, Frankton, Greenfield, Knightstown, Lawrenceburg, Lewisville, Straughn, Tipton, and Walkerton as part of the program. At the end of 2022, the communities had installed 31,200 electric meters and 12,915 water meters through the project. With 14 communities already participating, IMPA is confident that the AMI program will continue to grow and benefit IMPA members throughout the state, bringing economies of scale and strength in numbers to more public power communities.

At the request of a number of IMPA’s members, IMPA Service Corp also began offering a Safety Program at the start of 2022 to provide additional training opportunities to lineworkers and utility personnel in member communities. The Agency partnered with TVPPA Education and Training to bring in knowledgeable and experienced trainers to guide participants through a variety of topics, including metering safety, arc flash protection, and workplace violence. As with other IMPA programs, participating communities cost share in the expenses of the program, with communities choosing the number of meetings they want to attend, and the cost of the program is reduced by the number of communities that participate. Through these programs, IMPA provides municipal utility employees with the skills and resources needed to serve their communities safely.

In addition to supporting the electric needs of communities, IMPA works with members through economic development initiatives designed to support and sustain the economic health of the community. IMPA organized two distinct sales trips for member communities in 2022, bringing together community representatives with site selectors and brokers in Chicago and Atlanta. Attendees had the opportunity to meet with companies potentially looking to expand in Indiana and share the benefits of growing in a public power community. IMPA also worked with its community members to expand economic development marketing efforts. The Agency conducted drone photography of marketable locations in several communities, as well as developed digital maps of 16 sites within 13 member communities. In 2022, this myriad of economic development efforts was recognized by *Site Selection Magazine*, which named the Agency as one of its Top 20 Utilities in Economic Development. IMPA was one of only two Indiana utilities selected for the honor out of over 3,300 utilities across the United States. By investing time and resources into supporting community development, IMPA helps its members to grow and thrive.

Beyond power supply and transmission, IMPA and IMPA Service Corp continue to seek opportunities to support member communities with their daily operations. With IMPA’s multiple service offerings, member communities have access to a variety of resources at a low cost. Looking toward the future, the Agency plans to adapt and evolve as IMPA has done for its four decades of operations. IMPA continues to adapt its service offerings to the assorted needs of its members, taking into account what is best for public power and IMPA as a whole.

# 2022

## BOARD OF COMMISSIONERS

Dick Justice  
GAS CITY



Jerry Schitter  
JASPER



Kevin Strickler  
WILLIAMSPORT



Jane Webb  
GREENFIELD



Nolan Ensor  
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Trend Weldy  
BREMEN



Mayor  
Stephen Wood  
RENSELAER



Brent Slover  
LINTON



Pudder Linne  
TROY



Lisa Corey  
FRANKTON



Andy Hicks  
TELL CITY



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Mike Jenner  
EDINBURGH



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Paul Bartlow  
MONTEZUMA



Allison Huenemann  
CRAWFORDSVILLE



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ETNA GREEN



Tony Foster  
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BLANCHESTER



Mike Hubble  
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CENTERVILLE



Mayor  
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SCOTTSBURG



Gary Moody  
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Ed Basquill  
LEBANON



Terry LaOrange  
BROOKSTON







Ron Slover  
COATESVILLE

John Reutepohler  
HUNTINGBURG



Josh Hawkins  
JAMESTOWN



Jim Caldwell  
ADVANCE



Kari Moss  
KINGSFORD HEIGHTS



Ruth Davidson  
STRAUGHN



Craig Switzer  
PENDLETON



Todd Corrie  
FRANKFORT



Shawn Lickey  
COLUMBIA CITY



Brian Mullen  
DARLINGTON



Jayana Posey  
LEWISVILLE



Sarah Ward  
KNIGHTSTOWN



Mayor  
Brad Crain  
COVINGTON



Tony Pochard  
ANDERSON



Nathan Ulerick  
DUBLIN



Mitch Moore  
BROOKLYN



Tim Martin  
DUNREITH



Kevin Killinger  
BARGERSVILLE



Kevin Shafer  
FLORA



Ken Smith  
VEEDERSBURG



Billy Kinnett  
LAWRENCEBURG



Randy Ennis  
WASHINGTON



Phil Buckmaster  
WALKERTON



Dick Klein  
TIPTON



Barry Lewis  
WAYNETOWN



Josh Chance  
PERU



Ron Koons  
MIDDLETOWN



Brad Zellers  
WINAMAC



Jamie Lindstrom  
ARGOS



**NOT PICTURED:** Pam Brown, Chalmers; Ashley Kelsey, New Ross; Jason Love, Pittsboro; Dale Turner, Rising Sun; Steve Farrington, Rockville; and Randy Cokl, South Whitley

# FINANCIAL HIGHLIGHTS

## 2022 ANNUAL OPERATING RESULTS

Operating Revenues, which are composed of sales to municipalities and other revenues, increased by approximately \$40.9 million (8.4%) compared to 2021. Due to higher operating costs and energy sales, 2022 sales to municipalities increased by approximately 8.4% compared to 2021. The average accrued cost per kWh for 2022 was 8.41 cents, an approximate 7.5% increase compared to 2021.

Total operating expenses increased by approximately \$42.1 million (10.1%) compared to 2021. Higher purchased power, production, fuel and transmission costs were the primary drivers of higher operating expenses. Total non-operating expenses decreased by approximately \$4.9 million (11.2%) compared to 2021.

### Condensed Consolidated Statements of Revenues, Expenses and Changes in Net Position (\$ millions)

	2022	2021
Sales to municipalities	\$ 521.0	\$ 480.6
Other revenues	8.6	8.1
<b>Total Operating Revenues</b>	<b>529.6</b>	<b>488.7</b>
Purchased power, fuel and production expenses	286.2	251.7
Transmission and local facilities	58.6	50.6
Other operating expenses	113.0	113.4
<b>Total Operating Expenses</b>	<b>457.8</b>	<b>415.7</b>
<b>Total Operating Income</b>	<b>71.8</b>	<b>73.0</b>
Interest expense	60.0	59.5
Interest income	(11.9)	(6.0)
Other non-operating income	(9.4)	(9.9)
<b>Total Non-Operating Expenses (Income)</b>	<b>38.7</b>	<b>43.6</b>
<b>Change in Net Position</b>	<b>33.1</b>	<b>29.4</b>
<b>Net Position at Beginning of Year</b>	<b>444.9</b>	<b>415.5</b>
<b>Net Position at End of Year</b>	<b>\$ 478.0</b>	<b>\$ 444.9</b>

Utility plant decreased approximately \$17.2 million in 2022 and increased approximately \$19.9 million in 2021. Capital additions were approximately \$102.2 million in 2022. Net retirements in 2022 were approximately \$55.1 million. Depreciation expense was approximately \$64.3 and \$47.8 million in 2022 and 2021, respectively.

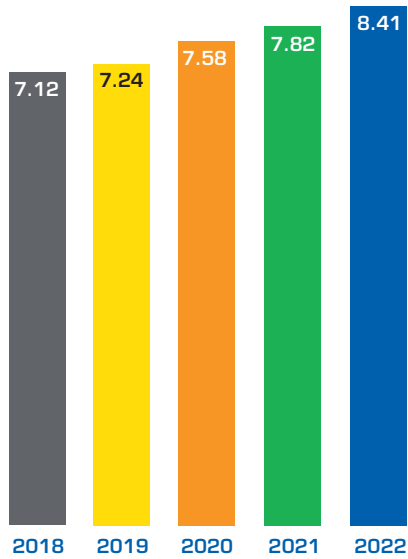
During 2022 and 2021, total net position increased approximately \$33.1 million and \$29.4 million, reflecting IMPA's 2022 and 2021 net income, respectively.

Debt service coverage for 2022 and 2021 was 1.37 times and 1.33 times, respectively. The Agency's bond resolution requires debt service coverage to be at least 1.10 times.

### Condensed Consolidated Statements of Net Position

(\$ millions)

	2022	2021
Utility plant, net	\$ 1,288.8	\$ 1,306.0
Cash and investments	386.3	366.7
Other current assets	197.5	140.7
Non-current assets and deferred outflow of resources	262.7	233.7
<b>Total Assets and Deferred Outflow of Resources</b>	<b>\$ 2,135.3</b>	<b>\$ 2,047.1</b>
Net investment in capital assets	(123.4)	(60.4)
Restricted	177.2	162.8
Unrestricted	424.2	342.5
<b>Total Net Position</b>	<b>478.0</b>	<b>444.9</b>
Current liabilities	161.0	163.0
Non-current liabilities and deferred inflow of resources	1,496.3	1,439.2
<b>Total Liabilities</b>	<b>\$ 1,657.3</b>	<b>\$ 1,602.2</b>
<b>Total Net Position Liabilities and Deferred Inflow of Resources</b>	<b>\$ 2,135.3</b>	<b>\$ 2,047.1</b>



COST PER KILOWATT-HOUR TO MEMBERS (Cents/kWh)



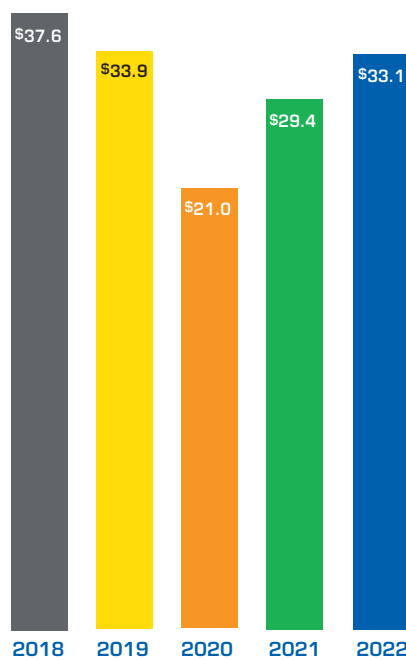
KILOWATT-HOUR SALES (in millions)



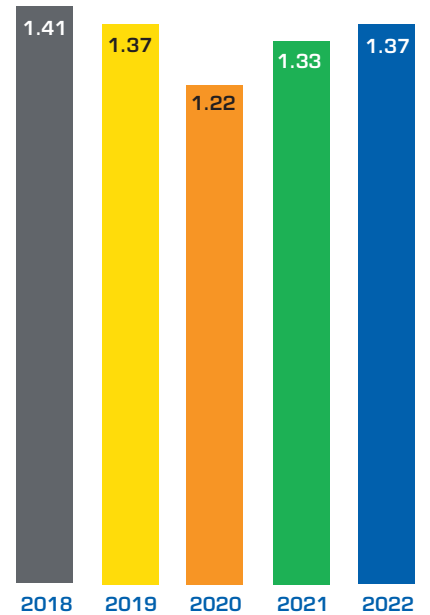
NON-COINCIDENT PEAK DEMAND (MW)



SALES TO MUNICIPALITIES (\$ Millions)






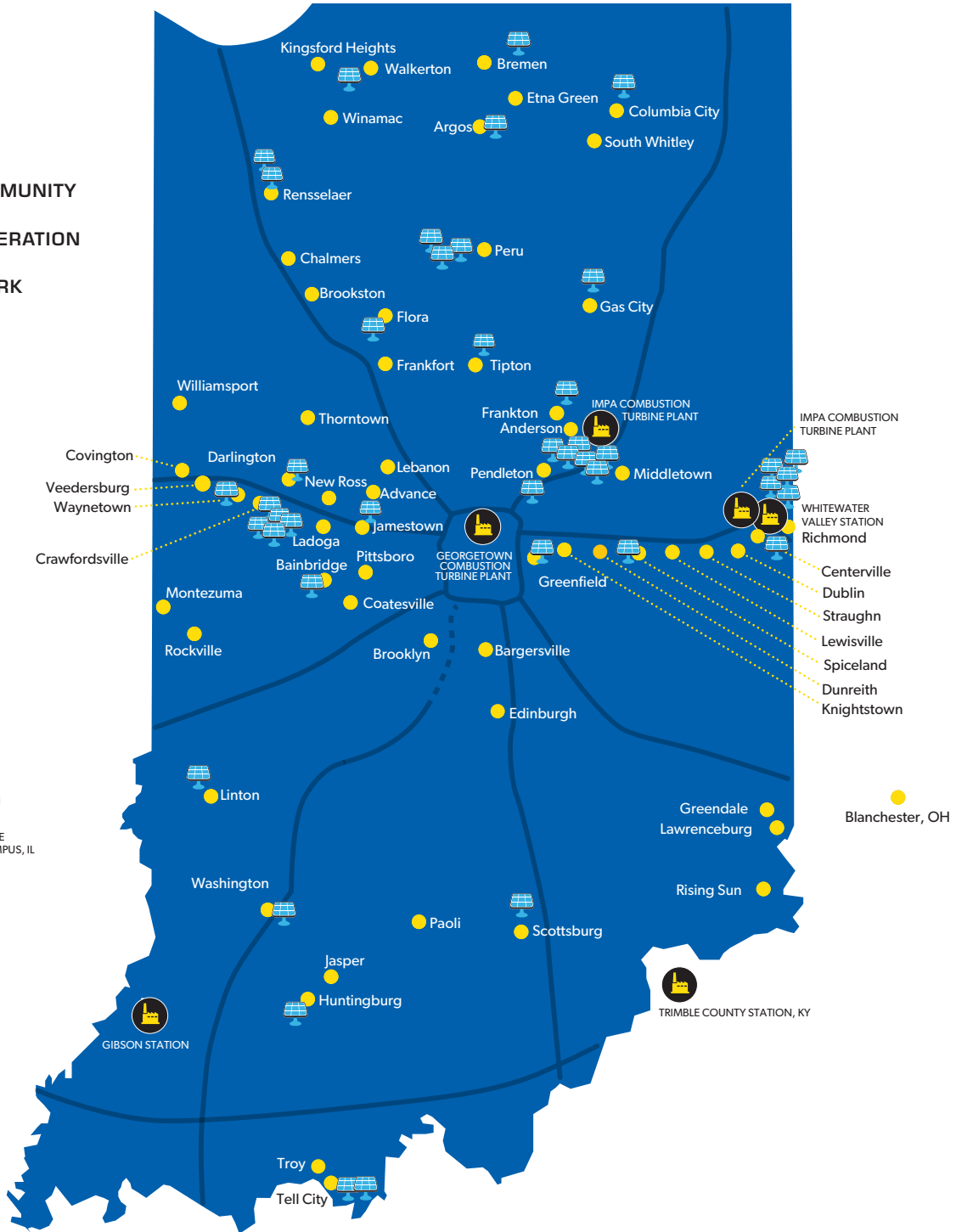
NET INCOME (\$ Millions)

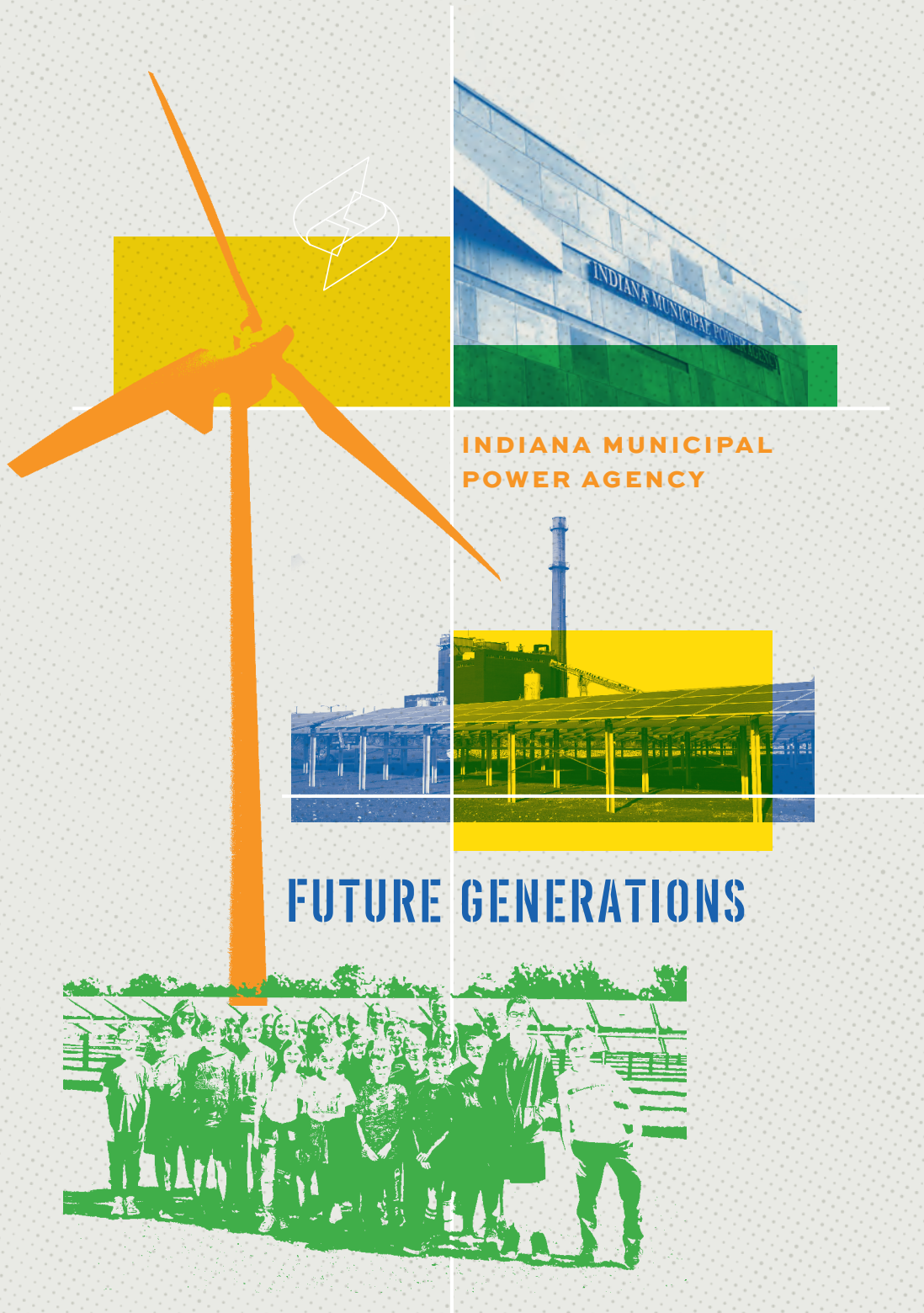


DEBT SERVICE COVERAGE (Times)

# MEMBER COMMUNITIES

-  IMPA COMMUNITY
-  IMPA GENERATION
-  SOLAR PARK





Martin Luther King, Jr. once said,

***We are not makers of history. We are made by history.***

**IMPA as an Agency today has truly been formed by its history — the visionaries that created the Agency, the decisions that shaped the Agency’s operations, and the evolution of IMPA’s service over time. As the Agency embarks on its next 40 years of existence, IMPA will continue to write its own story and history as the Agency adapts for future generations.**





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## **Appendix G2 – 2022 IMPA Annual Report - Financials**

# **Indiana Municipal Power Agency**

Consolidated Financial Statements as of and for  
the years ended December 31, 2022 and 2021,  
Management's Discussion and Analysis, and  
Report of Independent Auditors

# Indiana Municipal Power Agency

Consolidated Financial Statements as of and for  
the years ended December 31, 2022 and 2021

Management's Discussion and Analysis and Report of Independent Auditors

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## REPORT OF INDEPENDENT AUDITORS

To the Board of Commissioners of Indiana Municipal Power Agency

### **Opinion**

We have audited the accompanying consolidated financial statements of Indiana Municipal Power Agency and its subsidiaries (the "Agency"), which comprise the consolidated statements of net position as of December 31, 2022 and 2021, and the related consolidated statements of revenues, expenses and changes in net position and of cash flows for the years then ended, including the related notes (collectively referred to as the "consolidated financial statements").

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the financial position of the Agency as of December 31, 2022 and 2021, and the results of its operations and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

### **Basis for Opinion**

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (US GAAS). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are required to be independent of the Agency and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### **Responsibilities of Management for the Consolidated Financial Statements**

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Agency's ability to continue as a going concern for one year after the date the consolidated financial statements are available to be issued.

### **Auditors' Responsibilities for the Audit of the Consolidated Financial Statements**

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with US GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery,

intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the consolidated financial statements.

In performing an audit in accordance with US GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Agency's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the consolidated financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Agency's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

### **Required Supplemental Information**

Accounting principles generally accepted in the United States of America require that the accompanying management's discussion and analysis on pages 3 through 5 be presented to supplement the basic financial statements. Such information is the responsibility of management, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplemental information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP  
Chicago, Illinois  
March 31, 2023

## **INDIANA MUNICIPAL POWER AGENCY MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)**

This discussion and analysis of the Indiana Municipal Power Agency's (IMPA or the Agency) consolidated financial performance provides an overview of the Agency's activities for the fiscal year ended December 31, 2022 and 2021. It should be read in conjunction with the basic consolidated financial statements and the accompanying notes.

### **CONSOLIDATED FINANCIAL STATEMENTS**

The consolidated financial statements presented herein include all of the activities of IMPA and its affiliate IMPA Service Corp. The Agency substantially follows the Uniform System of Accounts prescribed by the Federal Energy Regulatory Commission. These statements are prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America. IMPA has implemented all Governmental Accounting Standards Board (GASB) pronouncements. To the extent that GASB does not have applicable accounting standards, IMPA has chosen the option to implement Financial Accounting Standards Board (FASB) pronouncements. IMPA Service Corp is a not-for-profit service corporation formed by IMPA to provide non-power supply services to IMPA members and other municipal entities. IMPA Service Corp's revenues and expenses are reported in IMPA's consolidated statements of revenues, expenses and changes in net position in other revenues and other non-operating income, respectively.

The consolidated statements of revenues, expenses and changes in net position and cash flows present information about IMPA's business activities. The consolidated statements of net position report year-end assets and deferred outflow of resources, liabilities and deferred inflow of resources, and net position based on the original cost adjusted for any depreciation, amortization or unrealized gains/losses, as appropriate. Over time, increases in the Agency's net position are one indicator of its financial strength. Other factors to consider are the Agency's wholesale electric rates and its ability to maintain or exceed the debt service coverage levels required by its bond resolution.

## CONDENSED CONSOLIDATED STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION (\$ millions)

	2022	2021	2020
Sales to municipalities	\$ 521.0	\$ 480.6	\$ 454.8
Other revenues	8.6	8.1	8.4
<b>Total Operating Revenues</b>	<b>529.6</b>	<b>488.7</b>	<b>463.2</b>
Purchased power, fuel, and production expense	286.2	251.7	226.1
Transmission and local facilities	58.6	50.6	53.6
Other operating expenses	113.0	113.4	116.3
<b>Total Operating Expenses</b>	<b>457.8</b>	<b>415.7</b>	<b>396.0</b>
<b>Total Operating Income</b>	<b>71.8</b>	<b>73.0</b>	<b>67.2</b>
Interest expense	60.0	59.5	62.0
Interest income	(11.9)	(6.0)	(5.2)
Other non-operating income	(9.4)	(9.9)	(10.6)
<b>Total Non-Operating Expenses (Income)</b>	<b>38.7</b>	<b>43.6</b>	<b>46.2</b>
<b>Change in Net Position</b>	<b>33.1</b>	<b>29.4</b>	<b>21.0</b>
<b>Net Position at Beginning of Year</b>	<b>444.9</b>	<b>415.5</b>	<b>394.5</b>
<b>Net Position at End of Year</b>	<b>\$ 478.0</b>	<b>\$ 444.9</b>	<b>\$ 415.5</b>

### 2022 Discussion

Operating Revenues which are composed of sales to municipalities and other revenues, increased by approximately \$40.9 million (8.4%) compared to 2021. Due to higher operating costs and energy sales, 2022 sales to municipalities increased by approximately 8.4% compared to 2021. The average accrued cost per kWh for 2022 was 8.41 cents, an approximate 7.5% increase compared to 2021.

Total operating expenses increased by approximately \$42.1 million (10.1%) compared to 2021. Higher purchased power (13.0%), fuel (21.6%), and transmission (15.6%) costs were the primary drivers of higher operating expenses. Total non-operating expenses decreased by approximately \$4.9 million (11.2%) compared to 2021.

### 2021 Discussion

Operating Revenues increased by approximately \$25.5 million (5.5%) compared to 2020. Due to higher than normal summer temperatures and post-COVID sales beginning to return to normal, 2021 energy sales increased by approximately 2.4% compared to 2020. The average accrued cost per kWh for 2021 was 7.82 cents, an approximate 3.2% increase compared to 2020.

Total operating expenses increased by approximately \$19.7 million (5.0%) compared to 2020. An increase in energy sales was the primary driver of higher operating expenses. Total non-operating expenses decreased by approximately \$2.6 million (5.6%) compared to 2020.

## CONDENSED CONSOLIDATED STATEMENTS OF NET POSITION (\$ millions)

	2022	2021	2020
Utility plant, net	\$ 1,288.8	\$ 1,306.0	\$ 1,286.1
Cash and investments	386.3	366.7	422.5
Other current assets	197.5	140.7	128.0
Non-current assets and deferred outflow of resources	262.7	233.7	203.1
<b>Total Assets and Deferred Outflow of Resources</b>	<b>\$ 2,135.3</b>	<b>\$ 2,047.1</b>	<b>\$ 2,039.7</b>
Net investment in capital assets	(123.4)	(60.4)	(124.4)
Restricted	177.2	162.8	195.0
Unrestricted	424.2	342.5	344.9
<b>Total Net Position</b>	<b>478.0</b>	<b>444.9</b>	<b>415.5</b>
Current liabilities	161.0	163.0	155.7
Non-current liabilities and deferred inflow of resources	1,496.3	1,439.2	1,468.5
<b>Total Liabilities</b>	<b>1,657.3</b>	<b>1,602.2</b>	<b>1,624.2</b>
<b>Total Net Position, Liabilities and Deferred Inflow of Resources</b>	<b>\$ 2,135.3</b>	<b>\$ 2,047.1</b>	<b>\$ 2,039.7</b>

Utility plant decreased approximately \$17.2 million in 2022 and increased approximately \$19.9 million in 2021. Capital additions were approximately \$102.2 million in 2022. Net retirements in 2022 were approximately \$55.1 million. Depreciation expense was approximately \$64.3 and \$47.8 million in 2022 and 2021, respectively.

During 2022 and 2021, total net position increased approximately \$33.1 million and \$29.4 million, reflecting IMPA's 2022 and 2021 net income, respectively.

Debt service coverage for 2022 and 2021 was 1.37 times and 1.33 times, respectively. The Agency's bond resolution requires debt service coverage to be at least 1.10 times.

During 2022, IMPA issued the 2022 Series A Bonds with a total par amount of approximately \$94.1 million. A portion of the 2022 Series A Bond's proceeds were issued for ongoing system improvements and a portion of the proceeds were issued to refund IMPA's 2012 Series A Bonds totaling approximately \$20.5 million. The net present value savings from the refunding was approximately \$1.8 million.

In January 2021, IMPA refunded the remaining outstanding 2010 Series B Bonds totaling \$12,845,000. IMPA will save approximately \$950,000 of reduced interest expense as a result of the refunding. No new long-term debt was issued during 2021.



**INDIANA MUNICIPAL POWER AGENCY  
CONSOLIDATED STATEMENTS OF REVENUES, EXPENSES AND CHANGES  
IN NET POSITION**

(in thousands)

<b>For the Years Ended December 31,</b>	<b>2022</b>	<b>2021</b>
<b>Operating Revenues</b>		
Sales to municipalities	\$ 520,969	\$ 480,553
Other revenues	8,620	8,123
<b>Total Operating Revenues</b>	<b>529,589</b>	<b>488,676</b>
<b>Operating Expenses</b>		
Purchased power	178,900	158,283
Fuel	76,373	62,793
Production	30,926	30,578
Transmission and local facilities	58,554	50,643
Other operating	21,418	22,683
Maintenance	25,654	23,900
Depreciation	66,914	49,518
Future recoverable costs	(972)	17,255
<b>Total Operating Expenses</b>	<b>457,767</b>	<b>415,653</b>
<b>Operating Income</b>	<b>71,822</b>	<b>73,023</b>
<b>Non-Operating Expenses (Income)</b>		
Interest expense	60,044	59,464
Accretion of premiums received on debt	(8,735)	(8,556)
Interest income	(11,917)	(5,962)
Other non-operating income	(680)	(1,334)
<b>Total Non-Operating Expenses (Income)</b>	<b>38,712</b>	<b>43,612</b>
<b>Change in Net Position</b>	<b>33,110</b>	<b>29,411</b>
<b>Net Position at Beginning of Year</b>	<b>444,926</b>	<b>415,515</b>
<b>Net Position at End of Year</b>	<b>\$ 478,036</b>	<b>\$ 444,926</b>

The accompanying notes are an integral part of the above statements.

# INDIANA MUNICIPAL POWER AGENCY

## CONSOLIDATED STATEMENTS OF NET POSITION

(in thousands)

December 31,	2022	2021
<b>Assets</b>		
<b>Utility Plant</b>		
Utility plant in service	\$ 1,867,478	\$ 1,797,388
Less: accumulated depreciation	(707,005)	(644,601)
	1,160,473	1,152,787
Construction work in progress	128,283	153,193
<b>Total Utility Plant, Net</b>	<b>1,288,756</b>	<b>1,305,980</b>
<b>Long-Term Investments</b>	<b>24,776</b>	<b>12,221</b>
<b>Restricted Cash and Cash Equivalents</b>	<b>192,212</b>	<b>192,572</b>
<b>Current Assets</b>		
Unrestricted cash and cash equivalents	146,682	142,810
Short-term investments	22,674	19,139
Municipality accounts receivable	73,263	66,688
Fuel stock and material inventory	26,838	21,957
Other current assets	97,420	52,139
<b>Total Current Assets</b>	<b>366,877</b>	<b>302,733</b>
<b>Non-Current Assets</b>	<b>192,001</b>	<b>161,004</b>
<b>Deferred Outflow of Resources</b>	<b>70,698</b>	<b>72,676</b>
<b>Total Assets and Deferred Outflow of Resources</b>	<b>\$ 2,135,320</b>	<b>\$ 2,047,186</b>
<b>Net Position, Liabilities, and Deferred Inflow of Resources</b>		
<b>Net Position</b>		
Net investment in capital assets	\$ (123,412)	\$ (60,405)
Restricted	177,195	162,816
Unrestricted	424,253	342,515
<b>Total Net Position</b>	<b>478,036</b>	<b>444,926</b>
<b>Non-Current Liabilities</b>		
Long-term revenue bonds, net	1,381,673	1,337,420
Other non-current liabilities	82,413	70,422
<b>Total Non-Current Liabilities</b>	<b>1,464,086</b>	<b>1,407,842</b>
<b>Current Liabilities</b>		
Current maturities of revenue bonds	30,495	28,965
Short-term borrowing	-	22,600
Accounts payable	52,681	39,268
Accrued interest on revenue bonds	30,257	29,715
Accrued liabilities	47,555	42,469
<b>Total Current Liabilities</b>	<b>160,988</b>	<b>163,017</b>
<b>Deferred Inflow of Resources</b>	<b>32,210</b>	<b>31,401</b>
<b>Total Net Position, Liabilities and Deferred Inflow of Resources</b>	<b>\$ 2,135,320</b>	<b>\$ 2,047,186</b>

The accompanying notes are an integral part of the above statements.

**INDIANA MUNICIPAL POWER AGENCY**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(in thousands)

For the Years Ended December 31,	2022	2021
<b>Cash Flows From Operating Activities:</b>		
Receipts from municipalities	\$ 465,564	\$ 447,157
Other operating receipts	8,620	8,123
Payments for purchased power	(180,831)	(159,340)
Payments for fuel	(78,482)	(62,140)
Payments for production	(30,488)	(32,696)
Payments for transmission and local facilities	(54,047)	(47,865)
Cash deposits as collateral	5,430	27,797
Payments for other operating expenses	(20,777)	(16,837)
Payments for maintenance	(26,173)	(23,457)
<b>Net cash provided by operating activities</b>	<b>88,816</b>	<b>140,742</b>
<b>Cash Flows From Noncapital Financing Activities:</b>		
Net proceeds (payments) from short-term borrowing	(22,600)	7,600
<b>Net cash provided by (used in) noncapital financing activities</b>	<b>(22,600)</b>	<b>7,600</b>
<b>Cash Flows From Capital And Related Financing Activities:</b>		
Net additions to utility plant	(95,430)	(120,239)
Proceeds from sale of capital assets	17,302	24,232
Net issuance of long-term debt	107,183	-
Refunding of long-term debt	(20,515)	(12,845)
Principal payments on long-term debt	(28,965)	(32,875)
Interest payments	(59,502)	(60,623)
<b>Net cash used in capital and related financing activities</b>	<b>(79,927)</b>	<b>(202,350)</b>
<b>Cash Flows From Investing Activities:</b>		
Investment purchases	(35,465)	-
Maturities and called investments	19,000	24,000
Interest income and other	11,088	6,722
Joint Transmission System Deposit	22,600	(7,600)
<b>Net cash provided by investing activities</b>	<b>17,223</b>	<b>23,122</b>
<b>Net Increase (Decrease) in Cash and Cash Equivalents</b>	<b>3,512</b>	<b>(30,886)</b>
<b>Restricted and Unrestricted Cash and Cash Equivalents:</b>		
Balances at Beginning of Year	335,382	366,268
<b>Balances at End of Year</b>	<b>\$ 338,894</b>	<b>\$ 335,382</b>

The accompanying notes are an integral part of the above statements.

**INDIANA MUNICIPAL POWER AGENCY**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS (continued)**  
(in thousands)

<b>For the Years Ended December 31,</b>	<b>2022</b>	<b>2021</b>
<b>Reconciliation of Operating Income to Net Cash Provided by Operating Activities:</b>		
Operating Income	\$ 71,822	\$ 73,023
<b>Adjustments to reconcile operating income to net cash provided by operating activities:</b>		
Depreciation	66,914	49,518
Future recoverable costs	(972)	17,255
Changes in current assets and liabilities:		
Municipality accounts receivable	(6,575)	(2,368)
Fuel stock and material inventory	(4,881)	(108)
Accounts payable	11,478	5,449
Other	(48,970)	(2,027)
<b>Net cash provided by operating activities</b>	<b>\$ 88,816</b>	<b>\$ 140,742</b>

The accompanying notes are an integral part of the above statements.

# **INDIANA MUNICIPAL POWER AGENCY CONSOLIDATED FINANCIAL STATEMENTS' NOTES**

## **1. Organization and Significant Accounting Policies**

### **Organization and Operations**

Indiana Municipal Power Agency (IMPA or the Agency) is a body corporate and politic and a political subdivision of the State of Indiana. IMPA was created in June of 1980 by a group of municipalities for the purpose of jointly financing, developing, owning and operating electric generation and transmission facilities appropriate to the present and projected energy needs of its participating members. IMPA serves 60 Indiana cities and towns and one Ohio village. IMPA sells power to its members under long-term power sales contracts (the Power Sales Contracts). The members resell the power to retail customers within their respective municipal service territories. IMPA's owned nameplate generating capacity is 964 megawatts (MW) or 80% of IMPA's 2022 peak demand (IMPA's maximum annual hourly load). The remainder of IMPA's power is purchased from other utilities under long-term contracts with varying terms and expiration dates. Power is delivered to members through an integrated transmission system known as the Joint Transmission System (JTS), jointly-owned by IMPA, Duke Energy Indiana, Inc. (DEI), Duke Energy Ohio, Inc. (DEO), and Wabash Valley Power Association (WVPA); and, transmission service arrangements with other utilities and regional transmission organizations.

IMPA Service Corp was created by the Agency as a not-for-profit corporation to provide cost-effective services beyond power supply and transmission to members and other municipal utilities.

### **Principles of Consolidation**

The consolidated financial statements include the accounts of the Agency and its affiliate, IMPA Service Corp. All significant intercompany account balances and transactions have been eliminated in consolidation.

### **Basis of Presentation**

The accompanying consolidated financial statements are prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America (US GAAP). IMPA has implemented all Governmental Accounting Standards Board (GASB) pronouncements. To the extent that GASB does not have applicable accounting standards, IMPA has chosen the option to implement Financial Accounting Standards Board (FASB) pronouncements.

### **Utility Plant**

IMPA provides power to the communities it serves through ownership of utility plant, which includes: (1) an undivided 24.95% ownership in the 625 MW Gibson Unit 5 generating facility (Gibson Unit 5) placed in service in 1982; (2) an undivided 12.88% ownership in the 514 MW Trimble County Unit 1 generating facility (Trimble County Unit 1) placed in service in 1990; (3) an undivided 12.88% ownership in the 750 MW Trimble County Unit 2 generating facility (Trimble County Unit 2) constructed at the same site as Trimble County Unit 1 and placed in service in 2011; (4) an undivided

12.64% ownership in the 1600 MW Prairie State Generating Company, LLC (PSGC or Prairie State) placed in service in 2012; (5) seven wholly-owned combustion turbines and associated facilities aggregating 419 MW (two 41 MW units placed in service in 1992 and one 85 MW unit placed in service in 2004 located in Anderson, Indiana, two 41 MW units placed in service in 1992 located near Richmond, Indiana, and two 85 MW units located in Indianapolis, Indiana, placed in service in 2000; and (6) thirteen wholly-owned solar generating facilities with a total generating capacity of approximately 24 MW in member communities.

Based on future economics, IMPA, DEI, and WVPA, the joint owners of Gibson Unit 5, are considering closure of Gibson Unit 5 as early as 2026.

The Agency capitalizes fixed assets with an original cost greater than \$25,000, except for jointly-owned utility plant, which are capitalized based on the policies defined by DEI for Gibson Unit 5, by LG&E for Trimble County Unit 1 and Unit 2 and by PSGC for Prairie State Units 1 and 2, the coal mine and other Prairie State facilities. Utility plant is recorded at cost. Construction overhead costs include salaries, payroll taxes, fringe benefits and other expenses. The original cost of property replaced or retired, less salvage, is charged to accumulated depreciation. Depreciation is recorded over the estimated useful lives of the utility plant by using the straight-line method. The effective composite depreciation rate on utility plant is approximately 3.4% and 2.7% in 2022 and 2021, respectively.

IMPA's ownership interest in Prairie State includes an interest in coal reserves with an original cost net of depletion of \$7.5 and \$7.9 million at December 31, 2022 and 2021, respectively.

At December 31, 2022 and 2021, construction work in progress (CWIP) included construction costs for ongoing utility plant capital improvements.

### **Solar Generation Facilities (Solar Parks) Agreements**

IMPA has entered into purchase power agreements whereby IMPA has agreed to purchase all of the output from certain solar generation facilities (Solar Parks) located in IMPA member communities with a total capacity of approximately 147 MW. The Solar Parks were all engineered, procured and constructed (EPC) by IMPA. All purchase power contracts are for 25 years from when the respective Solar Park went into commercial operation. The purchase power contracts provide IMPA an option to buy the Solar Parks after six years.

As part of these purchase power agreements, IMPA loaned the respective purchaser a portion of the EPC price. The notes receivable are included in Non-Current Assets on the Consolidated Statements of Net Position.

IMPA records the difference between the EPC price and construction costs to a liability account. If the solar park is purchased back in the future, the difference will either be added to or subtracted

from the basis of the reacquired solar park. The liability is included in Other Non-Current Liabilities on the Consolidated Statements of Net Position.

Previously, IMPA had a purchase power contract for one solar park with a capacity of approximately 5 MW. The agreement had an option to buy the solar park during 2022. On August 31, 2022, IMPA exercised the option to purchase the solar park and terminated the purchase power contract.

## **Funds**

IMPA's Master Power Supply System Revenue Bond Resolution (the Bond Resolution) requires the creation and maintenance of certain funds and accounts. The Restricted Funds under the Bond Resolution are the Debt Service Fund and the Debt Service Reserve Fund. The Bond Resolution allows for the creation and maintenance of the Rate Stabilization Account, the Reserve and Contingency Fund, and the Asset Retirement Obligation Fund, the use of which is restricted by Board resolution. The Construction Fund includes restricted proceeds from bonds issued for specified capital projects. The Revenue Fund, the General Reserve Fund and the Operation and Maintenance Fund are all unrestricted and are to be used for the operating needs of the Agency.

## **Restricted and Unrestricted Cash and Cash Equivalents**

IMPA considers all highly liquid investments with an original maturity of three months or less to be cash equivalents.

## **Restricted and Unrestricted Investments**

IMPA classifies investments in U.S. government agencies and treasury securities as available for sale.

## **Fair Value Measurements**

IMPA uses fair value to measure certain financial instruments, with related unrealized gains or losses generally affecting regulatory assets and deferred inflows of resources. See Deferred Outflow of Resources and Deferred Inflow of Resources.

## **Hedging Derivative Instruments**

IMPA accounts for derivatives in accordance with GASB Statement No. 53, "Accounting and Financial Reporting for Derivative Instruments" (GASB 53). GASB 53 requires that hedging derivative instruments ("Hedging Transactions") be recorded at fair value and establishes certain requirements for revenue recognition, measurement and disclosure related to Hedging Transactions. IMPA's Hedging Transactions have been tested for effectiveness under the guidelines prescribed by GASB 53. IMPA utilized one of the three quantitative methods required by GASB 53, the regression analysis method. This method evaluates the effectiveness of a hedge transaction by comparing the statistical relationship between the cash flows of the potential hedging item and the hedgeable item. The effectiveness testing of IMPA's Hedging Transactions demonstrated that the hedges are effective as defined by GASB 53. See Note 5 for specific disclosures related to derivatives.

## Fuel Stock and Material Inventory

Fuel stock and materials and supplies are valued at average cost. The cost of fuel and materials used in production are expensed as recovered through revenues.

## Deferred Outflow and Inflow of Resources

In accordance with GASB Statement No. 62, "Codification of Accounting and Financial Reporting Guidance" (GASB 62), IMPA's consolidated financial statements reflect the rate making actions of the Board of Commissioners that result in the recognition of revenues and expenses in different time periods than entities that are not rate regulated. Deferred outflow of resources are expenditures incurred by the Agency that will be recovered in rates in future periods. Deferred inflow of resources are revenues collected in rates for expenses not yet incurred by the Agency.

Deferred outflow and inflow of resources consist of the following (in thousands):

<b>Deferred Outflow of Resources</b>	<b>2022</b>	<b>2021</b>
Regulatory Assets:		
Debt service net of related depreciation and amortization	\$ 21,623	\$ 24,192
Capital assets associated with asset retirement obligations	10,138	10,369
Future member rate benefits from solar agreements	8,027	4,183
Net valuation of financial instruments	1,607	1,443
Total Regulatory Assets	41,395	40,187
Other Deferred Outflow of Resources	29,303	32,489
	<b>\$ 70,698</b>	<b>\$ 72,676</b>

<b>Deferred Inflow of Resources</b>	<b>2022</b>	<b>2021</b>
Reserve for contingencies	\$ 29,598	\$ 28,798
Valuation of inventories	2,612	2,603
	<b>\$ 32,210</b>	<b>\$ 31,401</b>

## Employee Benefit Plan

IMPA maintains a 401(k) and 457(b) plan on behalf of all employees meeting certain eligibility requirements regarding length of employment, age and employee contributions. Employer contributions to the plan were approximately \$1.3 million and \$1.2 million for 2022 and 2021, respectively.

## Committed Line of Credit

IMPA has entered into a \$100 million committed line of credit agreement (the Credit Agreement) with PNC Bank. Under the Credit Agreement, IMPA may draw funds and/or post standby letters of credit. The Credit Agreement expires on December 31, 2023. At December 31, 2022, IMPA had posted letters of credit totaling \$8.5 million. At December 31, 2021, IMPA had posted letters of credit totaling \$6.5 million and a line of credit draw of \$22.6 million. The Credit Agreement is subordinated to IMPA's long-term revenue bonds, see Note 6, Long-Term Revenue Bonds. The Credit Agreement provides that PNC Bank may only require repayment prior to expiration if certain terms of default occur.



Certain interest rate provisions of the Credit Agreement reference the London Interbank Offered Rate (LIBOR). LIBOR will be discontinued prior to the expiration of the Credit Agreement. See Note 14, Subsequent Events, Committed Line of Credit.

### **Revenue Recognition and Rates**

IMPA sets rates in accordance with the Bond Resolution. The Bond Resolution requires the establishment of rates that, together with other revenues, are reasonably expected to pay IMPA's operating costs (excluding depreciation and amortization), and at least 110% of the Agency's aggregate debt service. IMPA's debt service requirements are designed to be relatively equal over the life of the bonds to help provide stable rates to the communities IMPA serves (Members). Rates are not subject to state or federal regulation. The debt service included in rates provides for full cost recovery of the utility plant assets over a period not exceeding the utility plant useful lives.

Revenues are recognized on an accrual basis when energy is delivered, while the Members are billed using budget rates. Differences between the accrued rate and the billed rate are collected from or returned to the Members via a tracker in subsequent periods. The amount to be paid to IMPA (a regulatory asset) was \$62.2 million and \$13.4 million at December 31, 2022 and 2021, respectively. The regulatory asset is included in other current assets in the consolidated statements of net position at December 31, 2022 and 2021.

### **Operating Revenues**

Operating revenues include sales to municipalities and other revenues. These descriptions of operating revenues reflect how economic factors affect the nature, amount, timing and uncertainty of revenues and cash flows. The Power Sales Contracts are the underlying agreements for IMPA's revenues from sales to members. Under the Power Sales Contracts, IMPA's performance obligation is to deliver electricity to member communities. Member communities consume electricity upon delivery and payment for electricity consumed is due within 30 days of receipt of invoice. There are no significant judgments in determining or allocating the transaction price. IMPA does not have any material contract assets or liabilities. IMPA does not incur any material costs to obtain or fulfill contracts with customers.

### **Operating Expenses**

IMPA's operating expenses are defined as purchased power and expenses directly related to, or incurred in support of, the production and transmission of electricity to the participating communities IMPA serves.

### **Non-Operating Expenses**

Non-operating expenses include interest income and expenses, costs related to the issuance of bonds, amortization of bond premiums, Build America Bond (BAB) subsidies and other non-operating revenues and expenses.

## **IMPA Service Corp**

IMPA Service Corp's revenues and expenses are reported as other revenues and other operating expenses, respectively.

## **Regional Transmission Organizations (RTOs)**

IMPA is a transmission owning member of the Midcontinent Independent System Operator (MISO) and a transmission dependent utility of the MISO and PJM Interconnection, LLC (PJM). The MISO schedules, manages and oversees operational control of the JTS.

The MISO and PJM are independent organizations whose purposes are to ensure the reliability of their respective integrated, regional electrical transmission systems, to facilitate a regional wholesale marketplace, to provide non-discriminatory access to the transmission system and to maintain and improve electric system reliability.

IMPA records all net sales through MISO and PJM to purchase power on the Consolidated Statements of Revenues, Expenses and Changes in Net Position.

## **Income Taxes**

IMPA, as a political subdivision of the State of Indiana, is exempt from federal and state income taxes. IMPA qualifies for federal income tax exclusion under Internal Revenue Code section 115. IMPA Service Corp is exempt from federal income tax under Internal Revenue Code section 501 (a) as a 501 (c) (3) organization.

## **Use of Estimates**

The preparation of the consolidated financial statements in conformity with US GAAP requires management to make estimates and assumptions that affect the reported assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. The reported results of operations are not indicative of results of operations for any future period.

## **Accounting Pronouncements Issued**

During 2018, the GASB issued Statement No. 89, *"Accounting for Interest Cost Incurred before the End of a Construction Period"* (GASB 89). GASB 89 establishes certain accounting requirements for interest cost incurred before the end of a construction period. IMPA adopted GASB 89 for the period beginning January 1, 2021. GASB 89 does not have a material impact on IMPA's consolidated financial statements.

During 2022, the GASB issued Statement No. 100, *"Accounting Changes and Error Corrections - an amendment of GASB Statement No. 62"* (GASB 100) and Statement No. 101, *"Compensated Absences"* (GASB 101). GASB 100 enhances accounting and financial reporting for accounting changes and error corrections. GASB 101 updates the recognition and measurement guidance for compensated absences. GASB 100 and GASB 101 are effective for fiscal years beginning after June

15, 2023. IMPA believes that GASB 100 and GASB 101 will not have a material impact on IMPA's consolidated financial statements.

## 2. Capital Assets

Capital asset activity for the years ended December 31, 2022 and 2021, was as follows (in thousands):

<b>2022</b>	<b>Beginning Balance</b>	<b>Additions</b>	<b>Transfers</b>	<b>Retirements</b>	<b>Ending Balance</b>
Utility plant in service	\$ 1,797,388	\$ 14,299	\$ 59,565	\$ (3,774)	\$ 1,867,478
Construction work in progress	153,193	87,891	(59,565)	(53,236)	128,283
Total Utility Plant (Gross)	1,950,581	102,190	-	(57,010)	1,995,761
Less accumulated depreciation for utility plant in service	(644,601)	(64,301)	-	1,897	(707,005)
	<b>\$ 1,305,980</b>	<b>\$ 37,889</b>	<b>\$ -</b>	<b>\$ (55,113)</b>	<b>\$ 1,288,756</b>

<b>2021</b>	<b>Beginning Balance</b>	<b>Additions</b>	<b>Transfers</b>	<b>Retirements</b>	<b>Ending Balance</b>
Utility plant in service	\$ 1,730,910	\$ 5,833	\$ 70,579	\$ (9,934)	\$ 1,797,388
Construction work in progress	156,448	107,691	(70,579)	(40,367)	153,193
Total Utility Plant (Gross)	1,887,358	113,524	-	(50,301)	1,950,581
Less accumulated depreciation for utility plant in service	(601,260)	(47,833)	-	4,492	(644,601)
	<b>\$ 1,286,098</b>	<b>\$ 65,691</b>	<b>\$ -</b>	<b>\$ (45,809)</b>	<b>\$ 1,305,980</b>

Accumulated depreciation additions for the years ended December 31, 2022 and 2021 do not include depreciation of asset retirement obligation assets of \$2.6 million and \$1.7 million, respectively.

Net retirements include approximately \$53 million of solar parks constructed under engineering, procurement and construction agreements. See Note 1, Organization and Significant Accounting Policies, Solar Generation Facilities (Solar Parks) Agreements.

## 3. Cash, Cash Equivalents and Investments

A Board policy governs IMPA's investments and deposits. IMPA's authorized investments include money market funds, federal agencies, investment contracts, US treasuries, commercial paper and repurchase agreements if the instruments meet certain minimum rating requirements.

During the years ended December 31, 2022 and 2021, IMPA recorded a net decrease in the fair value of investments of \$0.5 million and \$0.8 million, respectively. To the extent any unrealized gains or losses are realized in the future, those realized gains or losses are refundable or recoverable through IMPA's rate-making methodology. Accordingly, any unrealized gains or losses at December 31, 2022 and 2021 have been included in regulatory assets on IMPA's consolidated statements of

net position. See Note 1, Organization and Significant Accounting Policies, Deferred Outflow and Inflow of Resources.

The carrying amount of cash and cash equivalents approximates fair value due to the short maturity of the instruments.

At December 31, 2022 and 2021, the original cost and the estimated fair values of the Agency's cash, cash equivalents and investments were as follows (in thousands):

INVESTMENT TYPE	2022		2021	
	Cost	Estimated Fair Value	Cost	Estimated Fair Value
<b>Long-Term Investments:</b>				
Restricted:				
U.S. Treasuries	\$ 24,735	\$ 24,776	\$ 11,572	\$ 12,221
Total Long-Term Investments	24,735	24,776	11,572	12,221
<b>Restricted and Unrestricted Cash and Cash Equivalents:</b>				
Restricted	192,212	192,212	192,572	192,572
Unrestricted	146,682	146,682	142,810	142,810
Total Restricted and Unrestricted Cash and Cash Equivalents	338,894	338,894	335,382	335,382
<b>Short-Term Investments:</b>				
Restricted:				
U.S. Government Agencies	-	-	16,021	16,117
U.S. Treasuries	22,302	22,674	2,887	3,022
Total Short-Term Investments	22,302	22,674	18,908	19,139
<b>Total</b>	<b>\$ 385,931</b>	<b>\$ 386,344</b>	<b>\$ 365,862</b>	<b>\$ 366,742</b>

The debt service account is comprised of current principal payments and interest due on long-term debt payable on the first business day of the subsequent year. The Bond Resolution restricts the debt service account, the debt service reserve fund and the construction fund. Additionally, certain accounts are restricted by Board resolution, including the rate stabilization account. See Note 1, Organization and Significant Accounting Policies, Funds.

U.S. Government agencies consist solely of mortgage-backed securities which are backed by the full faith and credit guaranty of the United States' government. All long-term investments mature in less than five years.

At December 31, 2022 and 2021, the Agency's cash, cash equivalents and investments were restricted as follows (in thousands):

FUND	2022		2021	
	Cost	Estimated Fair Value	Cost	Estimated Fair Value
<b>Unrestricted</b>	\$ 146,682	\$ 146,682	\$ 142,810	\$ 142,810
<b>Restricted by Board:</b>				
Rate Stabilization Fund	28,562	28,613	28,524	28,663
Other Board Restricted Accounts	46,027	46,078	42,446	42,564
<b>Restricted by Bond Resolution:</b>				
Debt Service Reserve Fund	76,338	76,649	91,963	92,586
Debt Service Account	61,251	61,251	59,204	59,204
Construction Fund	27,071	27,071	915	915
<b>Total</b>	<b>\$ 385,931</b>	<b>\$ 386,344</b>	<b>\$ 365,862</b>	<b>\$ 366,742</b>

#### 4. Net Position

At December 31, 2022 and 2021, the Agency's net position included the following components (in thousands):

	2022	2021
Net investment in capital assets	\$ (123,412)	\$ (60,404)
Restricted for debt service	30,995	29,489
Restricted for debt service reserve	76,649	92,586
Restricted for bond financed construction projects	27,070	915
Restricted by Board resolution	42,481	39,826
Unrestricted	424,253	342,514
	<b>\$ 478,036</b>	<b>\$ 444,926</b>

## 5. Hedging Transactions

IMPA purchases futures power and gas contracts (the Futures Contracts) to minimize the cost volatility of purchased power in the energy markets and fuel costs. IMPA does not purchase derivatives for speculative purposes. The acquisition of Futures Contracts allows IMPA to effectively plan and set stable rates from period to period for IMPA's Members. Certain of IMPA's Futures Contracts are settled by a cash payment that is equal to the differential between the contract price and the settlement price (financially settled). Financially settled Futures Contracts are hedging derivative instruments as defined by GASB 53. IMPA has entered into hedging transactions in the MISO energy market, the PJM energy market and the natural gas market.

IMPA is required to test its hedging transactions for effectiveness as of the reporting date as defined by GASB 53. IMPA's outstanding hedging transactions at December 31, 2022 and 2021 have been determined by management to be effective. Accordingly, IMPA's outstanding hedging transactions are reported in the Agency's December 31, 2022 and 2021 consolidated statements of net position at fair value. The fair market value for each of IMPA's hedging transactions have been determined by computing the difference between the contractual futures price and the published futures price at the respective market's settlement point(s) at market closing as of December 31, 2022 and 2021. The power hedging transactions settle and are valued at either the Indiana Hub or the AEP Dayton Hub. At December 31, 2022 and 2021 there were no gas hedging transactions outstanding.

As of December 31, 2022, the Agency had recorded unrealized gains and losses in other current assets of approximately \$2.0 million, other accrued liabilities of approximately \$12.9 million, and non-current liabilities of approximately \$21.9 million. As of December 31, 2021, the Agency has recorded unrealized gains and losses in other current assets of approximately \$0.3 million, other accrued liabilities of approximately \$5.1 million, and non-current liabilities of approximately \$13.8 million.

The following tables provide information related to IMPA's outstanding derivative instruments as of December 31, 2022 and 2021 (in thousands):

**December 31, 2022**

Trade Date Range	Duration	Notional Amount	Ending Fair Value	
			Classification	Amount
Mar 2017	Jan 2023 thru Dec 2023	1,200 MW	Other current assets	\$ 12,853
Mar 2017	Jan 2024 thru Dec 2026	2,350 MW	Non-current assets	21,861
Oct 2022 thru Dec 2022	Jan 2023 thru Aug 2023	225 MW	Accrued liabilities	(1,961)
				<b>\$ 32,753</b>

**December 31, 2021**

Trade Date Range	Duration	Notional Amount	Ending Fair Value	
			Classification	Amount
Mar 2017	Jan 2022 thru Dec 2022	1,200 MW	Other current assets	\$ 5,067
Mar 2017	Jan 2023 thru Dec 2026	4,450 MW	Non-current assets	13,810
Nov 2021 thru Dec 2021	Jan 2022 thru Feb 2022	75 MW	Accrued liabilities	(299)
				<b>\$ 18,578</b>

**Credit Risk**

All of IMPA's hedging transactions were transacted on exchanges. Exchanges are designed to avoid contract defaults and credit risk. Exchanges utilize clearing houses to guarantee the performance of each market participant for each transaction. The clearing house requires every market participant to deposit funds into a margin account. There is a required deposit for a percent of the nominal value of outstanding contracts and a deposit to reflect each market participant's daily gain or loss in the market. These funds are held by the clearing house and available to settle any defaults by market participants, thus mitigating credit risk related to IMPA's outstanding financially settled forward power contracts.

**Basis Risk**

IMPA is exposed to basis risk on its hedging transactions because the pricing point of the hedged commodity may settle at a different pricing point than the hedge transaction (Indiana Hub or AEP-Dayton Hub). At December 31, 2022 and 2021, the Indiana Hub price was \$70.97 and \$43.31 per MWh and the AEP-Dayton Hub price was \$82.28 and \$36.86 per MWh, respectively.

**Termination Risk**

IMPA is exposed to termination risk on its hedging transactions because a counterparty may fail to perform under the terms of one or more contracts resulting in the termination of the contract with that counterparty. IMPA's termination risk is mitigated for those forward power contracts transacted on the Exchanges.

**Commitments**

IMPA and its counterparties post collateral to support certain purchase power futures agreements. At December 31, 2022 and December 31, 2021, IMPA's counterparties had net collateral posted to IMPA of \$20.3 million and \$14.8 million, respectively. Net collateral posted to IMPA is included in accrued liabilities on the consolidated statement of net position.



## 6. Long-Term Revenue Bonds

IMPA issues Power Supply System Revenue Bonds to finance its acquisition and construction of utility plant. Long-term revenue bonds issued and outstanding at December 31, 2022 and 2021, consist of the following (in thousands):

Bond Series	Interest Rates	Due Date January 1,	Optional Redemption Date	2022	2021
2007 Series B	-	-	-	\$ -	\$ 5,465
2009 Series C	7.350%	2023 to 2024	-	8,785	10,795
2010 Series A	5.594%	2031 to 2042	-	123,640	123,640
2012 Series A	-	-	-	-	20,515
2013 Series A	4.750% - 5.250%	2023 to 2042	July 1, 2023	23,235	24,380
2014 Series A	5.000%	2023 to 2032	January 1, 2025	148,180	153,215
2016 Series A	4.000% - 5.000%	2033 to 2042	July 1, 2026	366,350	366,350
2016 Series C	3.000% - 5.000%	2023 to 2039	July 1, 2027	141,010	142,610
2017 Series A	5.000%	2023 to 2042	January 1, 2028	209,450	218,645
2019 Series A	4.000% - 5.000%	2023 to 2042	January 1, 2029	117,040	120,455
2019 Series B	Variable	2023 to 2042	-	58,220	59,320
2022 Series A	5.000% - 5.500%	2024 to 2053	January 1, 2032	94,100	-
				1,290,010	1,245,390
Less current maturities				(30,495)	(28,965)
Long-term revenue bonds				1,259,515	1,216,425
Unamortized premium, net				122,158	120,995
				<b>\$ 1,381,673</b>	<b>\$ 1,337,420</b>

The 2009 Series C Bonds are non-callable. The 2010 Series A Bonds are designated as direct payment Build America Bonds and have make-whole optional redemption and extraordinary optional redemption provisions. The 2019 Series B Bonds are currently callable at a redemption prices of 100%.

The 2012 Series A Bonds were refunded during 2022. All other bonds are callable on or after the optional redemption date at a redemption price of 100%.

Debt service requirements based on contractual maturities at December 31, 2022 were as follows (in thousands):

	<b>Principal</b>	<b>Interest</b>
2023	\$ 30,495	\$ 61,046
2024	40,215	62,427
2025	42,255	60,394
2026	44,345	58,293
2027	46,555	56,089
2028-2032	271,165	243,568
2033-2037	344,920	170,188
2038-2042	438,345	76,771
2043-2047	12,140	7,457
2048-2052	15,860	3,731
2053	3,715	204
	<b>\$ 1,290,010</b>	<b>\$ 800,168</b>

Long-term revenue bond activity for the periods ended December 31, 2022 and 2021, was as follows (in thousands):

<b>December 31, 2022</b>	<b>Beginning Balance</b>	<b>Additions</b>	<b>Reductions</b>	<b>Ending Balance</b>
Long-term revenue bonds	\$ 1,245,390	\$ 94,100	\$ (49,480)	\$ 1,290,010
Less:				
Current maturities	(28,965)	28,965	(30,495)	(30,495)
Unamortized premium, net	120,995	13,084	(11,921)	122,158
	<b>\$ 1,337,420</b>	<b>\$ 136,149</b>	<b>\$ (91,896)</b>	<b>\$ 1,381,673</b>

<b>December 31, 2021</b>	<b>Beginning Balance</b>	<b>Additions</b>	<b>Reductions</b>	<b>Ending Balance</b>
Long-term revenue bonds	\$ 1,291,110	\$ -	\$ (45,720)	\$ 1,245,390
Less:				
Current maturities	(32,875)	32,875	(28,965)	(28,965)
Unamortized premium, net	132,331	-	(11,336)	120,995
	<b>\$ 1,390,566</b>	<b>\$ 32,875</b>	<b>\$ (86,021)</b>	<b>\$ 1,337,420</b>

### **Certain Debt Covenants**

IMPA's long-term revenue bonds are payable from and secured by a pledge of and security interest in all revenues, income, rents and receipts attributable to the Agency's ownership and operation of IMPA's power supply system and certain funds established by the Bond Resolution including IMPA's Unrestricted and Restricted by Bond Resolution funds. See Note 3, Cash, Cash Equivalents and Investments. IMPA's Members, the State of Indiana nor any political subdivision of Indiana are obligated to pay the debt service on IMPA's long-term revenue bonds.

The Bond Resolution has no subjective acceleration provisions or events of default that change the timing of repayment.

### **Debt Service Coverage**

The IMPA Power Supply System Revenue Bond Resolution (Resolution) contains covenants that require IMPA to collect through rates 1.1 times the current year’s accrued aggregate debt service. Debt service coverage was 1.37 times and 1.33 times for the years ended December 31, 2022 and 2021, respectively. Debt service coverage for 2022 was calculated based on approximately \$30.5 million of principal and approximately \$60.0 million of 2022 interest expense payable during 2022 and in January 2023. Management believes that IMPA is in compliance with all financial debt covenants and restrictions as of December 31, 2022.

### **2010 Series A Build America Bonds (BAB)**

BAB subsidies are included in other non-operating income on the consolidated statements of revenues, expense and changes in net position. BABs subsidies (in \$ thousands):

	<b>2022</b>	<b>2021</b>
BAB subsidies	\$ 2,282	\$ 2,283

### **2010 Series B Bonds**

On January 14, 2021, IMPA refunded the remaining outstanding 2010 Series B Bonds (the “Refunded Bonds”) totaling \$12,845,000. The Refunded Bonds were scheduled to mature on January 1, 2022 and January 1, 2023. The interest rate on the Refunded Bonds was 5%. IMPA will save approximately \$950,000 of reduced interest expense as a result of the refunding.

### **2019 Series B Variable Rate Bonds**

The 2019 Series B Variable Rate Bonds (2019 B Bonds) are secured by an irrevocable transferable direct pay letter of credit (Letter of Credit) issued for the benefit of the owners of the 2019 B Bonds. The interest rates on the 2019 B Bonds is adjusted daily, and bondholders may require repurchase of the 2019 B bonds at the time of such interest rate adjustments. Through the Letter of Credit, the Agency has the right of direct offset with its lender for any repurchases. These bonds have a contractual maturity of January 1, 2042. The Letter of Credit has a contractual maturity of December 19, 2024. The interest rate at December 31, 2022 on the 2019 B Bonds was 3.62%.

### **2022 Series A Bonds**

On August 18, 2022 IMPA closed on the issuance of the 2022 Series A Bonds. The par value of the 2022 Series A Bonds is \$94.1 million. The bonds were sold with a \$13.1 million premium and as part of the bond transaction, IMPA released \$15.7 million from the Agency’s Debt Service Reserve Fund. The total proceeds from the issuance of the bonds, the premium and the Debt Service Reserve Fund release was approximately \$122.9 million. IMPA used the proceeds to refund IMPA’s 2012 A Bonds (the Refunded Bonds), deposit \$100 million to the Agency’s Construction fund and pay certain costs associated with the issuance of the bonds.

The Refunded Bonds had a par value of approximately \$20.5 million. The Refunded Bonds were callable on July 1, 2022. The net present value savings from the refunding of the Refunded Bonds was approximately \$1.8 million.

## **7. Fair Value of Financial Instruments**

As defined in the fair value measurements standard, fair value is the price that would be received for an asset or paid to transfer a liability (exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between willing market participants on the measurement date. This standard establishes a fair value hierarchy that prioritizes the inputs used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted market prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3).

The three levels of the fair value hierarchy defined by the fair value measurement standard are as follows:

### **Level 1**

Quoted prices are available in active markets for identical assets or liabilities as of the reporting date. Active markets are those where transactions for the asset or liability occur in sufficient frequency and volume to provide pricing information on an ongoing basis. IMPA's Level 1 assets primarily consist of money market funds that are listed on active exchanges which are included in unrestricted cash and cash equivalents and restricted cash and cash equivalents on the consolidated statements of net position. IMPA does not have any liabilities that meet the definition of Level 1.

### **Level 2**

Pricing inputs are either directly or indirectly observable in the market as of the reporting date, other than quoted prices in active markets included in Level 1. Level 2 includes those financial instruments that are valued using models or other valuation methodologies based on assumptions that are observable in the marketplace throughout the full term of the instrument, can be derived from observable data or are supported by observable levels at which transactions are executed in the marketplace. These models are primarily industry-standard models that consider various assumptions, including time value, volatility factors, and current market and contractual prices for the underlying instruments, as well as other relevant economic measures. IMPA's Level 2 assets and liabilities consist primarily of debt securities and financially settled futures contracts, which are included in long-term investments, short-term investments, other current assets, non-current assets, accrued liabilities, and other non-current liabilities.

### **Level 3**

Pricing inputs that are generally unobservable from objective sources. These inputs may be used with internally developed methodologies that result in management's best estimate of fair value. IMPA does not have any assets or liabilities that meet the definition of Level 3.

IMPA utilizes market data and assumptions that market participants would use in pricing the asset or liability, including assumptions about risk and the risks inherent in the inputs to the valuation technique. These inputs can be readily observable, market corroborated, or generally unobservable. IMPA primarily applies the market approach for recurring fair value measurements using the best information available. Accordingly, IMPA maximizes the use of observable inputs and minimizes the use of unobservable inputs.

The carrying amounts of cash, accounts receivable and accounts payable approximate their fair value due to their short-term nature.

The following tables set forth IMPA's financial assets and financial liabilities that are accounted for on a recurring basis at fair value by level within the fair value hierarchy. As required by the fair value measurement standard, assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. IMPA's assessment of the significance of a particular input to the fair value measurement requires judgment and may affect the valuation of fair value assets and liabilities and their placement within the fair value hierarchy levels.

Recurring fair value measures at December 31, 2022 and 2021 were as follows (in thousands):

<b>December 31, 2022</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Total</b>
Assets:			
Money market funds	\$ 321,041	\$ -	\$ 321,041
Debt securities	-	47,450	47,450
Futures contracts	-	34,714	34,714
	<b>\$ 321,041</b>	<b>\$ 82,164</b>	<b>\$ 403,205</b>
Liabilities:			
Futures contracts	\$ -	\$ 1,961	\$ 1,961

<b>December 31, 2021</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Total</b>
Assets:			
Money market funds	\$ 267,705	\$ -	\$ 267,705
Debt securities	-	31,360	31,360
Futures contracts	-	18,877	18,877
	<b>\$ 267,705</b>	<b>\$ 50,237</b>	<b>\$ 317,942</b>
Liabilities:			
Futures contracts	\$ -	\$ 299	\$ 299

## 8. Asset Retirement Obligations

Asset retirement obligations represent legal obligations associated with the retirement of tangible long-lived assets that are incurred upon the acquisition, construction, development or normal operation of the assets. IMPA's asset retirement obligations consist primarily of costs associated with the future cost of mine reclamation and closure at Prairie State and with the future closure of waste disposal facilities at IMPA's jointly-owned plants.

Asset retirement obligations are estimated annually during the fourth quarter of the year and recognized in the period in which they are incurred, if a reasonable estimate of fair value can be made. The asset retirement obligations are accreted to their present value at the end of each reporting period. The associated estimated asset retirement costs are capitalized as part of the carrying amount of the long-lived asset and depreciated over their useful lives. The Agency uses an expected cash flow approach to measure the obligations. IMPA's asset retirement obligations have no impact on change in net position due to the Agency applying the provisions of GASB 62.

The following table presents the details of the Agency's asset retirement obligations for the periods ended December 31, 2022 and 2021 (in thousands):

	<b>Beginning Balance</b>	<b>Liabilities Settled</b>	<b>Accretion</b>	<b>Cash Flow Revisions</b>	<b>Ending Balance</b>
2022	\$ 17,915	(2,683)	566	2,366	\$ 18,164
2021	\$ 20,716	(2,350)	667	(1,118)	\$ 17,915

The cash flow revisions in 2021 were primarily the result of changes in the estimates of future costs of closure of coal ash storage systems at Gibson Unit 5 and Trimble County Units 1 and 2.

IMPA's share of the asset retirement obligations for the Agency's jointly-owned generation at December 31, 2022 and 2021 was as follows (in thousands):

	<b>2022</b>	<b>2021</b>
Gibson Unit 5	\$ 5,846	\$ 4,952
Prairie State Units 1 & 2	3,552	3,269
Trimble County Units 1 & 2	8,766	9,694
	<b>\$ 18,164</b>	<b>\$ 17,915</b>

IMPA's percentage share of the total asset retirement obligations approximates the Agency's percentage ownership share of each of the respective jointly owned production facilities. See Note 11, Jointly-Owned Plant.

Asset Retirement Obligations are included in other non-current liabilities on the balance sheet. The associated capitalized asset retirement costs are included in deferred outflow of resources on the balance sheet.

The Agency had restricted assets for the payment of IMPA's share of the asset retirement obligations totaling approximately \$18.6 million and \$15.5 million at December 31, 2022 and 2021, respectively.

## 9. Arbitrage

A rebate payable to the Internal Revenue Service (IRS) generally results from the investment of bond proceeds at a higher rate of interest than the cost of borrowing. The excess of interest income over cost of borrowing is payable to the IRS within five years of the date of the bond offering and every five years thereafter. At December 31, 2022 and 2021, the Agency did not have a rebate payable. The estimated arbitrage expense is recorded as a reduction of interest income.

## 10. Concentration of Risk

Credit risk represents the risk of loss that would occur if suppliers or customers did not meet their contractual obligations to IMPA. Concentration of credit risk occurs when significant suppliers or customers possess similar characteristics that would cause their ability to meet contractual obligations to be affected by the same events.

Approximately 28.9% and 29% of the Agency's sales to municipalities were provided to two communities for the periods ended December 31, 2022 and 2021, respectively. Accounts receivable balances for the two communities account for approximately 29% and 33% of the total municipality accounts receivable balances as of December 31, 2022 and 2021, respectively. IMPA has a long-term energy purchase contract with one supplier that accounts for approximately 25% and 27% of IMPA's total energy for the years ended December 31, 2022 and 2021, respectively.

## 11. Jointly-Owned Plant

IMPA is a joint owner of Gibson Unit 5, Trimble County Units 1 and 2, Prairie State Units 1 and 2 and co-owns certain transmission property and local facilities. IMPA's portion of all operating costs associated with the commonly-owned facilities is reflected in the consolidated financial statements. See Note 1, Organization and Significant Accounting Policies, Utility Plant.

IMPA's investments in jointly-owned plant at December 31, 2022 were as follows (in thousands):

	Share	Utility Plant In Service	Accumulated Depreciation
Production			
Gibson Unit 5	24.95%	\$ 200,963	\$ 122,481
Prairie State Units 1 & 2	12.64%	763,915	208,049
Trimble County Units 1 & 2	12.88%	336,072	141,804
Transmission and local facilities	5.68%	308,179	76,077

## **12. Commitments and Contingencies**

### **Contracts and Capital Expenditures**

IMPA has purchased power contracts with several power producers. IMPA has firm commitments under take-or-pay contracts which expire on or before April 1, 2052. The total amount of these future purchase obligations at December 31, 2022 was approximately \$147.1 million for 2023 and \$2.7 billion through 2053.

IMPA anticipates its share of future capital expenditures for Gibson Unit 5, Prairie State Units 1 and 2, Trimble County Units 1 and 2, the combustion turbines, the JTS, Solar Parks, and other ongoing system projects to total approximately \$292 million for the years 2023 through 2027. The projected capital expenditures include both environmental improvements and expenditures of a normal and recurring nature. IMPA anticipates funding the foregoing projected capital improvements with a combination of internally generated funds and proceeds from future debt offerings.

### **Emissions Regulations**

There are currently no Environmental Protection Agency (EPA) regulations governing carbon dioxide emissions under the Clean Air Act. The EPA is expected to initiate a replacement rulemaking in early 2023. IMPA does not currently know to what extent a future rule will impact its generation resources.

### **Contract Disputes**

In the normal course of business, IMPA may be involved in various disputes with other parties. While management cannot predict the ultimate outcome of these disputes, total exposure as of the report issuance date is not material to IMPA's financial position or results of operations.

## **13. Illinois Senate Bill ("SB") 2408**

In 2021, Illinois passed SB 2408, the Climate and Equitable Jobs Act (CEJA). The CEJA requires a 45% reduction in existing publicly owned Illinois power plant carbon dioxide emissions by June 30, 2038. The CEJA further requires all publicly owned coal-fired generating units to permanently reduce carbon dioxide emission to zero by December 31, 2045.

The CEJA does, however, provide that if the reduction of output from or the closing of any plant creates a resource adequacy shortfall in the State of Illinois the plant can continue to operate until the reliability can otherwise be addressed. During the 2021/2022 planning year, Illinois was a net capacity importer. With the announced and required retirements, there is potential that Illinois will need to import even more capacity into the future.

The CEJA has a potential material future impact on IMPA's ownership share of the Prairie State Generating Company, LLC (Prairie State). IMPA and the other owners of Prairie State have and continue to develop plans to manage the potential impacts of the CEJA. Potential impacts cannot be gauged with certainty at this time.



## **14. Subsequent Events**

### **Committed Line of Credit**

On March 1, 2023 IMPA entered into a \$100 million committed line of credit agreement (the New Credit Agreement) with Bank of America. Under the New Credit Agreement, IMPA may draw funds and/or post standby letters of credit. The New Credit Agreement expires on March 1, 2026.

The New Credit Agreement is subordinated to IMPA's long-term revenue bonds. See Note 6, Long-Term Revenue Bonds. The New Credit Agreement provides that Bank of America may only require repayment prior to expiration if certain terms of default occur.

The credit agreement with PNC was terminated on March 1, 2023. See Note 1, Organization and Significant Accounting Policies, Committed Line of Credit.

### **Prairie State Lawsuit**

On March 22, 2023, the Sierra Club filed suit against the Prairie State Generating Company (Prairie State). The Sierra Club alleges that Prairie State is in violation of the Federal Clean Air Act. IMPA does not believe the suit has merit or is likely to have a material impact on the finances or operations of Prairie State. However, IMPA cannot be certain that the suit will not result in a material impact to the finances or operations of Prairie State.

**Appendix G2 – 2022 IMPA Annual Report - Financials**



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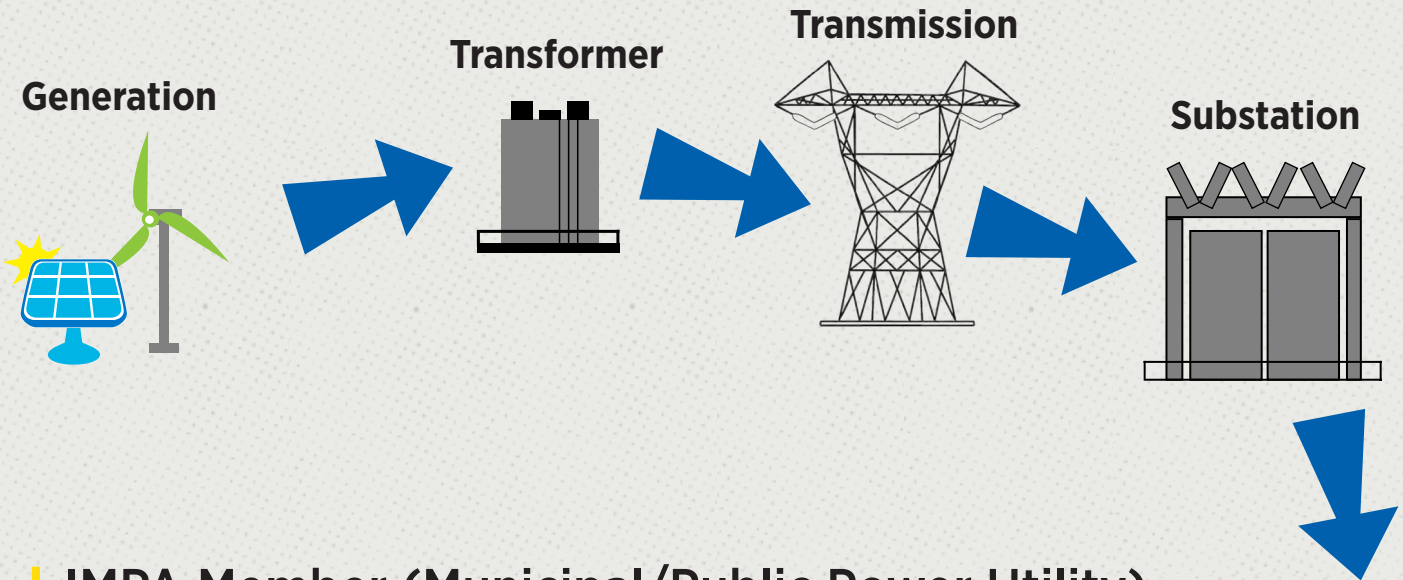
**INTEGRATED RESOURCE PLAN  
2024 - 2043**

FEBRUARY 2024

# How does electricity flow from IMPA to its member utilities?

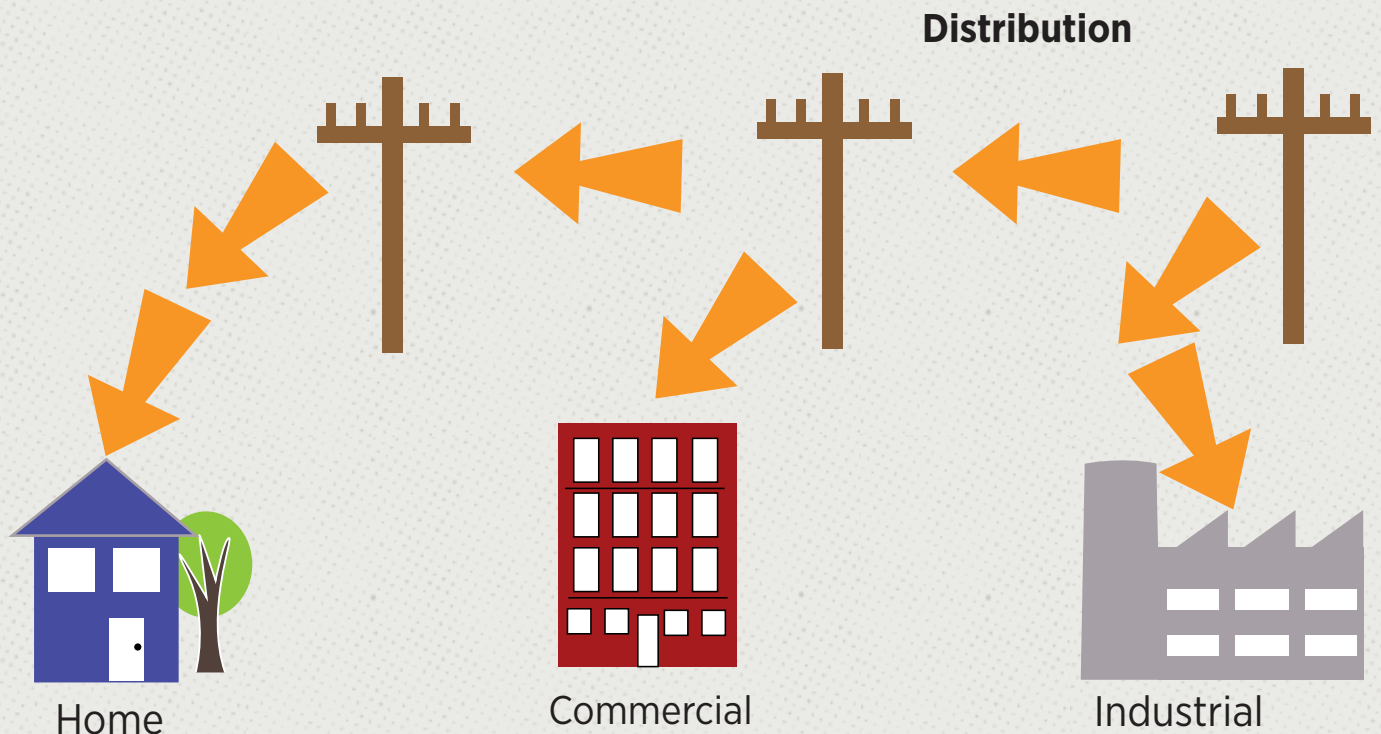
IMPA provides generation and transmission

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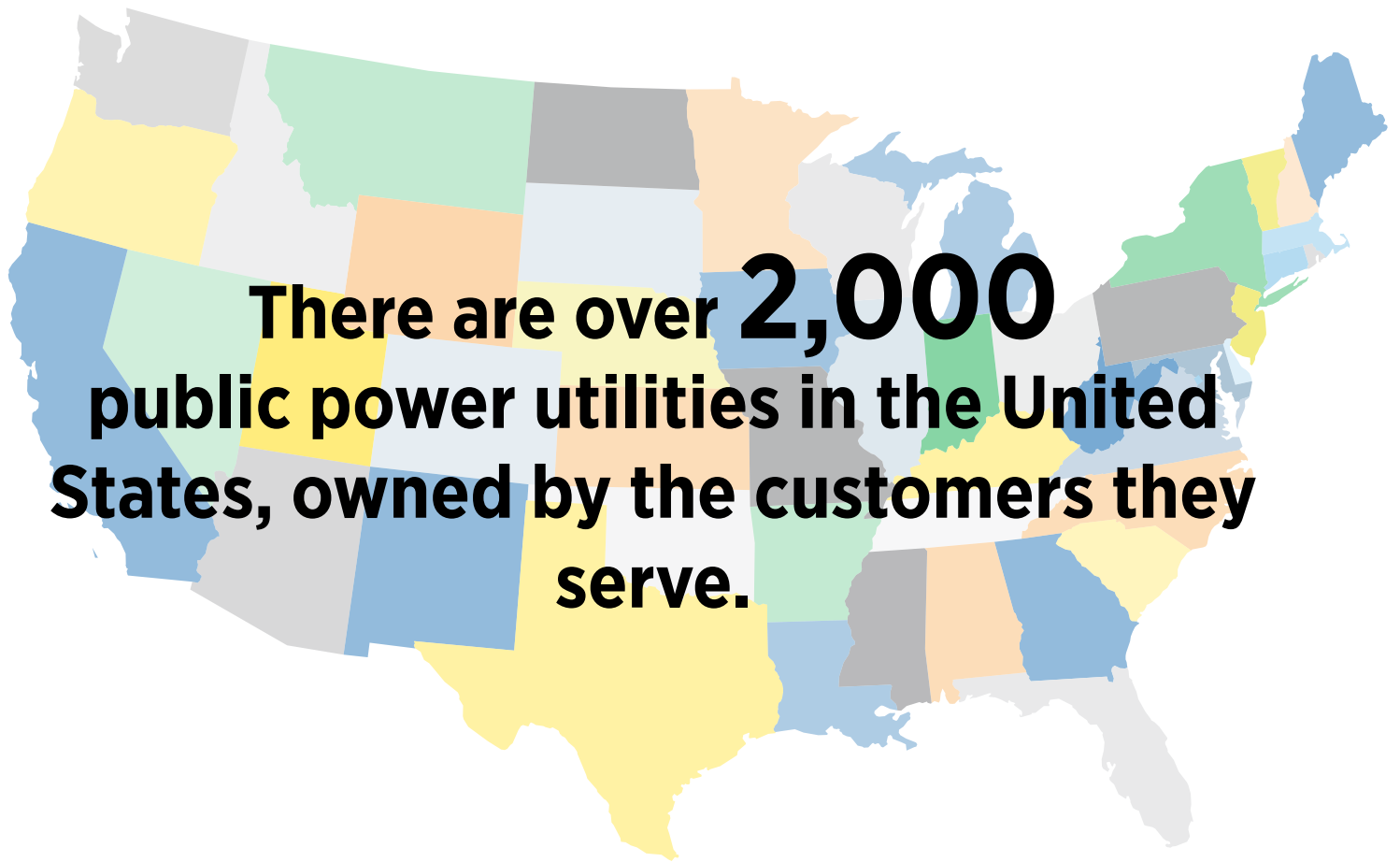


IMPA Member (Municipal/Public Power Utility) provides distribution

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# Public Power



**47  
Million**

customers served  
throughout the U.S.

**Local &  
Reliable**

service provided  
by friends & neighbors

**Not for  
Profit**

entities that exist  
to serve customers



# IMPA by the Numbers

**40**

years of operations

**61**

communities served

**350,000**

customers

**\$530  
million**

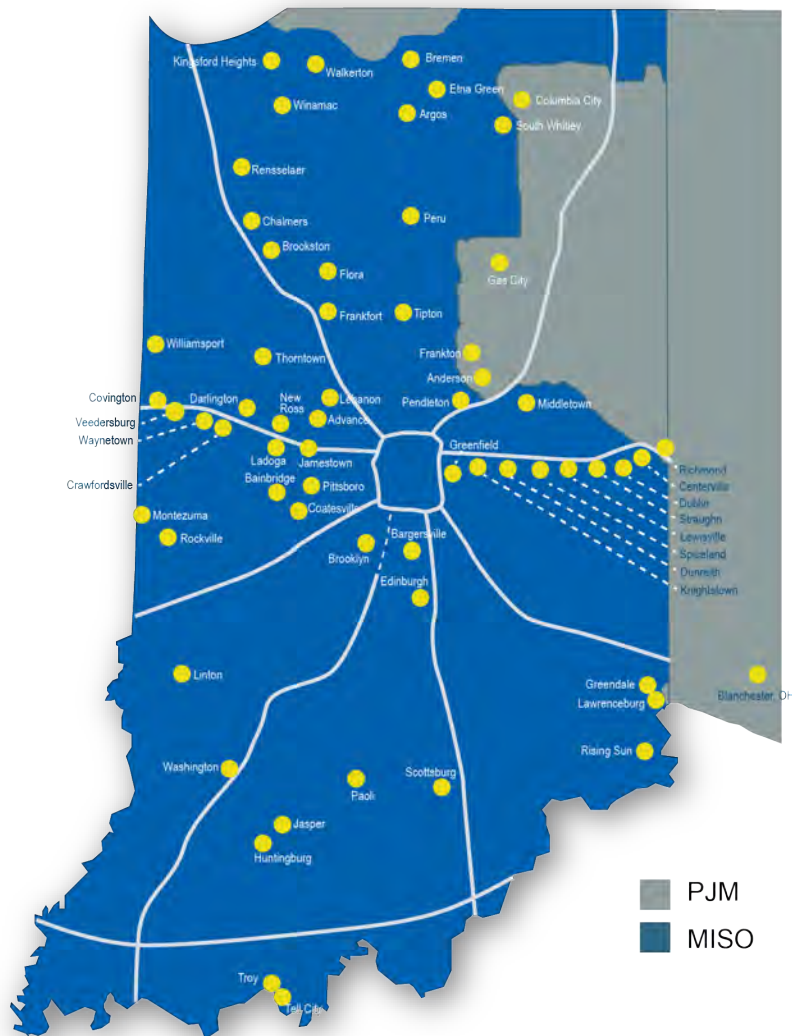
in annual revenues

**~\$2.0  
billion**

in total assets

**A1/A+**

strong bond ratings



Low-cost,  
Reliable,  
Environmentally  
Responsible  
Wholesale  
Power  
Provider

# What is Resource Planning?

IMPA creates scenarios as a structured way to think about the future, as scenario planning is a proven tool to better anticipate and respond to future risks and opportunities. IMPA develops stories about how the future might unfold by building alternate views of the future given different political, economic, regulatory, or technological assumptions. For the 2023 IRP, IMPA developed three scenarios for testing prospective portfolio decisions.

## Base Case

A world grounded in data that IMPA believes at this time to be the most accurate portrayal of future trends.

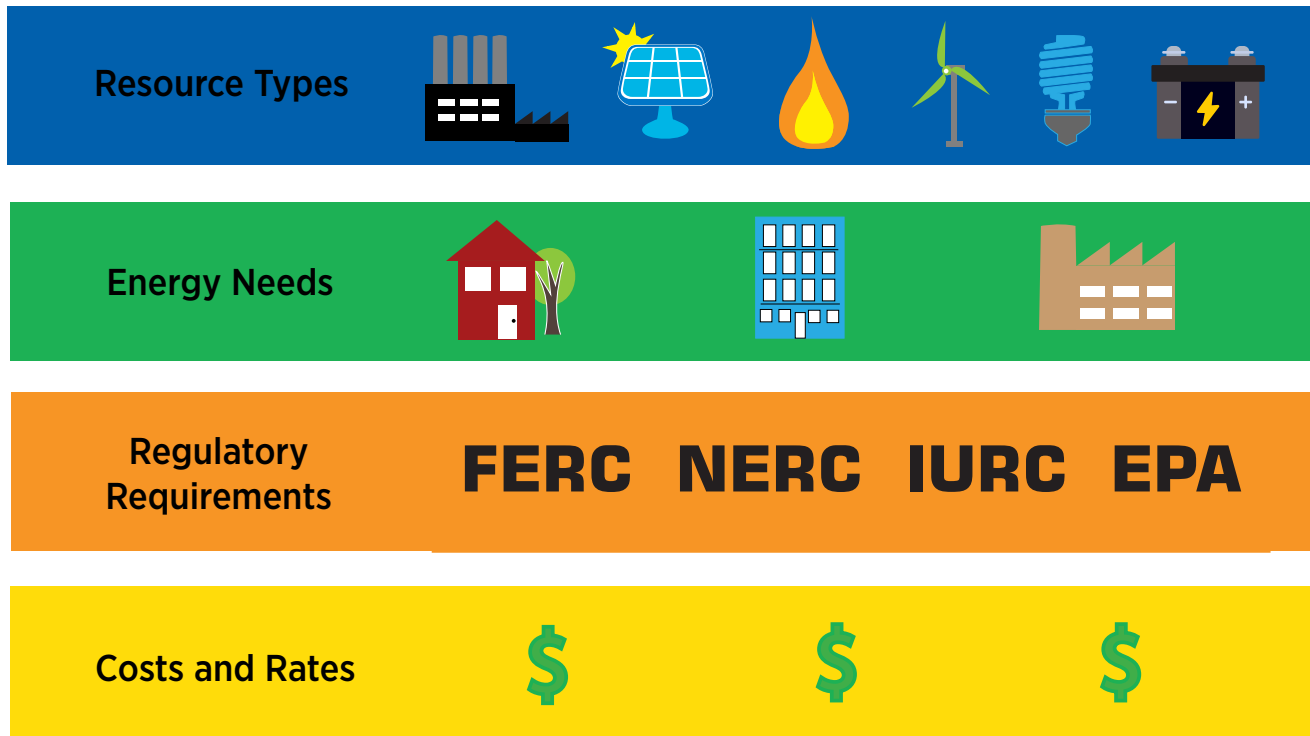
## Austerity Case

An economically pessimistic version of the base case with lower consumption and non-carbon tax incentives repealed.

## Voluntary CO2 Reduction Case

A “Green New Deal” type of world in which IMPA, presumably alongside the market as a whole, aims to reach net-zero carbon emissions by 2040.

## Resource Planning Process



# Resource Options



## Baseload - Nuclear

- Long lead time to develop
- Capital cost: \$9,000-\$10,000/kW
- Operating Costs (production and fuel) are relatively low and stable



## Intermediate - Natural Gas Combined Cycle

- Mid-range development time
- Capital cost: \$1,200-\$1,300/kW
- Cost dependent on natural gas, currently low-cost



## Peaking - Natural Gas Combustion Turbine

- Development times are short
- Capital cost: \$800-\$1,000/kW
- Operating costs are high
- Used during peak energy use times



## Intermittent - Wind

- Development times are short
- Capital cost: \$1,200-\$1,300/kW without subsidy
- Operating costs are low
- Dependent on wind conditions for energy output
- Unpredictable generation output



## Intermittent - Solar

- Development time is short
- Capital cost: \$1,200-\$1,500/kW DC without subsidy
- Operating costs are low and stable
- On-peak energy
- Dependent on local solar conditions for energy output
- Low winter capacity ratings



## Storage - Battery Energy Storage System (BESS)

- Newer technology
- Long discharge, industrial-sized batteries not yet available
- Capital cost \$1,300-\$1,400/kW
- Pairs well with high levels of intermittent generation



## Energy Efficiency - Reduced Consumption

- Investment is initial rebate/incentive to participants
- Achieves energy savings and reduces peak load
- Effectiveness depends on customer participation
- Demand Response



# IMPA's Integrated Resource Plan

## Key Findings

Due to the upcoming retirement of Gibson 5, IMPA faces a capacity shortfall towards the end of the decade. Current modeling suggests that a new, dual fuel combustion turbine would be a suitable replacement for the lost capacity due to Gibson 5's retirement. IMPA plans to execute a 200 MW bilateral capacity contract to fulfill capacity needs in the meantime.

## IMPA's Action Plan

Work with the Gibson 5 partners regarding the final plan, timing, and cost for retirement of the unit.

Execute short-term bilateral capacity contract and begin internal planning for the best path forward for adding CT capacity to its portfolio as a replacement for Gibson 5.

Monitor with the renewable energy market to evaluate potential utility scale projects that may benefit the power supply portfolio.

Continue the IMPA Energy Efficiency Program and implement revised demand response program.

Monitor the RTO/ISO market rules regarding renewable capacity accreditation and resource adequacy.

Monitor elections and the legislative process to remain informed on future environmental policy as it pertains to CO2.



**IMPA**

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