

2012 Preliminary CARIS Phase II Base Case Results

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*September 21, 2012
Rensselaer, NY*

Phase I - Projected Demand\$ Congestion by Constraint (\$M)

Nominal Value (\$M)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
CENTRAL EAST	268	226	229	209	212	243	257	295	318	329	2,584
LEEDS_PLSNTVLY_345	228	199	206	187	205	231	250	307	346	377	2,535
DUNWOODIE_SHORRD_345	41	46	49	54	57	60	65	69	73	80	595
GREENWOOD LINES	10	10	11	12	12	12	13	15	17	19	131
GOHLS S_GOWANUSS_345	5	4	4	4	5	5	5	6	7	8	52
WEST CENTRAL-OP*	0	1	3	2	2	4	5	8	9	9	45
ASTORIAW138_HG5_138*	0	0	0	0	0	1	1	1	1	1	5

* Reported numbers represent absolute values.

Phase II - Projected Demand \$ Congestion by Constraint (Nominal Values)

Demand Congestion \$	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
CENTRAL EAST	204	221	251	245	246	285	327	307	402	474
ATHENS_PLTVLLEY_345	147	142	172	196	216	252	292	322	355	370
Dunwoodie Shore Road	36	40	45	57	61	64	59	51	54	66
Greenwood	9	10	13	13	15	16	19	19	23	25
Gowanus	4	4	5	6	7	7	8	8	9	9
WEST CENTRAL-OP	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(1)	(2)
ASTORIAW138_HG5_138	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Demand Congestion \$	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
CENTRAL EAST	682	876	930	1,018	1,141	1,123	1,142	1,209	1,329	1,453
ATHENS_PLTVLLEY_345	435	477	583	580	582	530	545	580	621	673
Dunwoodie Shore Road	57	69	78	66	78	98	77	88	96	93
Greenwood	28	31	34	39	44	48	49	57	66	73
Gowanus	11	11	13	15	16	15	11	12	14	16
WEST CENTRAL-OP	(2)	(2)	(4)	(5)	(7)	(6)	(6)	(2)	(2)	(3)
ASTORIAW138_HG5_138	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)

Phase I - Projected Demand\$ Congestion by Zone (\$M)

Demand\$ Congestion (\$M)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
WEST	1	0	1	1	1	2	2	3	3	5
GENESSEE	1	0	0	0	0	0	1	1	2	2
CENTRAL	5	4	4	4	4	5	5	6	6	6
NORTH	5	7	7	7	8	8	8	9	10	10
MOHAWKVA	3	2	2	2	2	3	3	3	3	4
CAPITAL	46	40	41	37	38	43	46	52	56	57
HUDSONVA	56	50	51	47	50	55	59	69	76	80
MILLWOOD	19	17	18	16	17	19	21	24	27	28
DUNWOODI	37	33	34	31	33	37	39	46	51	55
NYCITY	343	307	319	301	317	347	373	442	492	530
LONGISLA	192	185	193	190	202	222	240	273	297	320
Total NYCA	709	646	670	636	672	740	796	929	1,023	1,098

Reported numbers represent absolute values.

Phase II - Projected Demand \$ Congestion by Zone (\$M)

Demand Congestion Metric (MM\$)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
WEST	1	1	1	1	2	3	4	5	8	11
GENESSEE	1	1	1	1	1	1	2	2	2	2
CENTRAL	4	5	5	5	5	6	7	7	9	11
NORTH	5	5	6	6	7	8	8	8	10	11
MOHAWKVA	2	2	3	3	3	3	3	4	4	5
CAPITAL	36	38	43	43	43	50	57	54	69	81
HUDSONVA	39	40	46	48	51	59	67	68	81	90
MILLWOOD	13	14	16	17	18	21	24	24	29	32
DUNWOODI	26	27	31	33	35	41	47	48	57	63
NYCITY	244	256	304	316	335	389	451	466	558	617
LONGISLA	150	159	184	207	219	245	258	252	288	330
Total NYCA	522	548	641	681	719	825	928	939	1,116	1,253

Demand Congestion Metric (MM\$)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
WEST	15	22	13	15	17	21	26	23	30	27
GENESSEE	4	6	6	6	6	6	5	5	5	6
CENTRAL	14	18	19	21	24	24	26	32	35	38
NORTH	13	15	16	17	19	20	21	22	24	26
MOHAWKVA	7	8	9	10	11	10	11	12	13	14
CAPITAL	113	143	152	165	185	183	186	198	217	236
HUDSONVA	117	141	157	165	178	171	175	186	202	219
MILLWOOD	42	50	55	58	62	60	62	65	71	77
DUNWOODI	81	97	109	114	122	117	120	127	138	151
NYCITY	788	935	1,051	1,115	1,199	1,169	1,196	1,281	1,402	1,532
LONGISLA	387	464	525	531	582	595	577	626	684	732
Total NYCA	1,582	1,898	2,113	2,217	2,405	2,375	2,403	2,577	2,821	3,058

Phase I - Projected Production Costs (\$M)

Production Cost (\$M)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
WEST	360	404	411	419	416	438	458	484	502	517
GENESSEE	31	36	36	36	37	37	37	38	38	39
CENTRAL	480	546	558	587	602	637	656	675	698	720
NORTH	13	15	15	19	20	23	23	23	22	23
MOHAWKVA	4	4	4	5	5	5	5	4	4	4
CAPITAL	766	898	921	963	1,007	1,059	1,103	1,154	1,200	1,258
HUDSONVA	110	86	84	82	83	99	112	133	148	165
MILLWOOD	116	132	134	136	138	140	141	143	145	147
DUNWOODI	-	-	-	-	-	-	-	-	-	-
NYCITY	1,196	1,446	1,467	1,529	1,608	1,803	1,874	1,939	2,039	2,139
LONGISLA	454	508	528	543	571	640	663	697	735	771
Total NYCA Gen.	3,530	4,074	4,158	4,319	4,486	4,880	5,072	5,289	5,530	5,783
Total IESO	2,366	2,875	2,940	3,086	3,215	3,298	3,369	3,433	3,511	3,643
Total PJM	16,974	20,466	21,094	22,139	23,191	25,877	26,847	27,854	28,949	30,119
Total NE	3,284	3,691	3,793	3,932	4,115	4,346	4,513	4,687	4,868	5,064
Total	26,153	31,106	31,985	33,476	35,007	38,401	39,801	41,262	42,858	44,609

Phase II - Projected Production Costs (\$M)

Production Cost Metric (MM\$)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
WEST	242	260	274	287	295	309	324	350	371	392
GENESSEE	38	38	38	39	40	40	41	41	41	42
CENTRAL	486	502	517	589	611	632	654	705	734	779
NORTH	26	22	22	33	36	36	37	42	47	45
MOHAWKVA	8	7	6	9	10	9	9	10	10	9
CAPITAL	647	663	723	881	938	1,005	1,064	1,139	1,219	1,313
HUDSONVA	42	49	56	62	65	72	80	91	104	114
MILLWOOD	136	138	139	141	143	144	146	148	150	152
DUNWOODI	0	0	0	0	0	0	0	0	0	0
NYCITY	1,149	1,180	1,267	1,569	1,675	1,765	1,872	2,101	2,298	2,510
LONGISLA	452	465	499	555	589	627	678	800	866	923
Total NYCA	3,225	3,321	3,543	4,167	4,401	4,639	4,904	5,428	5,840	6,278
Total IESO	2,452	2,521	2,664	3,090	3,270	3,431	3,583	3,751	3,934	4,120
Total PJM	16,527	17,302	18,652	22,021	23,333	24,650	25,921	28,401	30,401	32,472
Total NE	2,971	3,136	3,391	3,794	3,990	4,225	4,447	4,706	5,035	5,387
Total	25,175	26,280	28,251	33,073	34,993	36,946	38,856	42,285	45,210	48,256

Production Cost Metric (MM\$)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
WEST	394	398	576	607	640	669	703	725	758	790
GENESSEE	42	42	43	44	44	44	45	45	47	48
CENTRAL	762	759	784	821	854	884	912	1,181	1,231	1,279
NORTH	35	26	22	22	20	19	23	18	22	21
MOHAWKVA	7	6	6	6	5	5	6	6	6	6
CAPITAL	1,394	1,471	1,533	1,635	1,723	1,792	1,844	1,910	2,012	2,122
HUDSONVA	124	130	140	153	170	468	486	504	538	588
MILLWOOD	154	156	158	160	162	165	167	169	172	175
DUNWOODI	0	0	0	0	0	0	0	0	0	0
NYCITY	2,645	2,855	3,035	3,248	3,505	3,548	3,752	4,010	4,230	4,420
LONGISLA	1,040	1,105	1,175	1,310	1,392	1,452	1,602	1,691	1,793	1,928
Total NYCA	6,595	6,948	7,473	8,006	8,516	9,047	9,540	10,259	10,809	11,376
Total IESO	4,223	4,334	4,497	4,677	4,856	5,021	5,198	5,335	5,505	5,672
Total PJM	34,250	35,971	37,722	39,784	41,774	43,280	44,902	46,570	48,749	51,060
Total NE	5,669	5,937	6,205	6,549	6,877	7,077	7,278	7,534	7,924	8,355
Total	50,736	53,190	55,897	59,016	62,023	64,426	66,918	69,698	72,987	76,463

Phase I - Projected Generation (GWh)

Generation GWh	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
WEST	26,143	24,879	24,644	24,213	23,584	23,661	23,733	23,908	23,863	23,799
GENESSEE	4,678	4,694	4,679	4,681	4,680	4,692	4,675	4,676	4,675	4,690
CENTRAL	28,778	29,222	29,155	29,532	29,430	29,750	29,684	29,647	29,660	29,703
NORTH	8,024	8,061	8,038	8,095	8,105	8,164	8,131	8,108	8,084	8,114
MOHAWKVA	2,988	2,988	2,992	2,998	2,986	2,984	2,982	2,983	2,983	2,981
CAPITAL	19,341	20,759	20,710	20,964	20,958	21,221	21,241	21,312	21,278	21,357
HUDSONVA	3,142	1,992	1,913	1,768	1,709	1,898	2,056	2,324	2,463	2,605
MILLWOOD	15,763	15,789	15,763	15,763	15,764	15,789	15,762	15,763	15,763	15,789
DUNWOODI	6	6	6	6	6	6	6	6	6	6
NYCITY	23,052	25,819	25,603	25,957	26,044	27,904	27,830	27,542	27,767	27,825
LONGISLA	8,454	8,612	8,675	8,659	8,683	9,240	9,219	9,281	9,392	9,440
Total NYCA	140,369	142,821	142,178	142,636	141,947	145,306	145,319	145,550	145,933	146,309
Total IESO	174,148	180,925	182,357	184,088	185,513	186,956	186,985	187,101	187,314	188,487
Total PJM	730,181	721,556	720,798	718,785	718,091	712,724	712,747	713,335	713,641	713,891
Total NE	131,870	131,734	131,630	131,685	131,728	133,120	133,087	133,136	133,223	133,342
Total HQ*	4,326	4,327	4,420	4,404	4,382	4,350	4,302	4,298	4,420	4,414
Total	1,180,893	1,181,364	1,181,384	1,181,599	1,181,662	1,182,457	1,182,440	1,183,420	1,184,531	1,186,443

*Only Imports are modeled.

Phase II - Projected Generation (GWh)

Generation Metric (GWh)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
WEST	22,292	22,523	22,263	21,818	21,474	21,370	21,287	21,414	21,278	21,193
GENESSEE	4,645	4,636	4,633	4,659	4,645	4,642	4,638	4,654	4,633	4,628
CENTRAL	31,469	31,350	31,063	32,045	31,982	31,863	31,759	32,264	32,101	32,142
NORTH	9,425	9,275	9,224	9,400	9,396	9,373	9,353	9,419	9,430	9,341
MOHAWKVA	3,107	3,073	3,042	3,092	3,089	3,079	3,070	3,074	3,056	3,036
CAPITAL	19,083	18,221	18,306	20,685	20,975	21,095	21,079	21,492	21,464	21,452
HUDSONVA	1,440	1,574	1,619	1,520	1,482	1,527	1,570	1,679	1,756	1,815
MILLWOOD	15,763	15,763	15,764	15,789	15,763	15,763	15,763	15,790	15,763	15,763
DUNWOODI	6	6	6	6	6	6	6	6	6	6
NYCITY	27,126	26,021	25,546	29,206	29,671	29,317	29,359	31,294	31,803	32,340
LONGISLA	10,080	9,703	9,535	9,613	9,734	9,706	10,011	11,533	11,602	11,491
Total NYCA	144,436	142,143	141,001	147,833	148,217	147,740	147,895	152,618	152,892	153,206
Total IESO	175,518	175,399	177,418	179,509	181,249	182,803	184,106	185,620	186,568	187,433
Total PJM	725,850	729,560	729,270	719,790	717,498	717,494	717,315	712,332	712,226	712,233
Total NE	132,613	132,517	132,516	133,742	133,783	133,757	133,728	134,629	134,871	134,814
Total HQ	4,491	4,475	4,453	4,420	4,373	4,368	4,491	4,484	4,420	4,397
Total	1,182,908	1,184,094	1,184,657	1,185,294	1,185,119	1,186,162	1,187,535	1,189,683	1,190,976	1,192,084

Generation Metric (GWh)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
WEST	21,635	21,877	24,171	24,127	24,123	24,164	24,251	24,136	24,095	24,076
GENESSEE	4,620	4,632	4,624	4,622	4,616	4,627	4,614	4,613	4,623	4,633
CENTRAL	32,369	33,665	33,579	33,567	33,579	33,704	33,712	36,448	36,428	36,370
NORTH	9,339	9,542	9,460	9,437	9,399	9,396	9,426	9,372	9,396	9,391
MOHAWKVA	5,105	5,673	5,671	5,638	5,628	5,636	5,659	5,660	5,660	5,638
CAPITAL	21,496	21,581	21,517	21,622	21,676	21,809	21,860	21,835	21,794	21,840
HUDSONVA	1,840	1,830	1,868	1,926	2,025	5,443	5,498	5,491	5,545	5,715
MILLWOOD	15,763	15,789	15,763	15,764	15,763	15,789	15,763	15,762	15,763	15,789
DUNWOODI	6	6	6	6	6	6	6	6	6	6
NYCITY	32,002	32,771	33,188	33,376	34,230	33,562	34,551	35,601	35,617	35,099
LONGISLA	12,454	12,528	12,769	13,659	13,805	13,956	15,278	15,511	15,669	15,948
Total NYCA	156,629	159,893	162,616	163,744	164,850	168,092	170,617	174,434	174,594	174,506
Total IESO	187,147	187,161	187,695	188,160	188,649	189,477	189,999	189,907	190,101	190,281
Total PJM	710,532	708,452	706,225	705,805	705,243	702,438	700,428	697,792	698,604	699,486
Total NE	134,451	134,189	134,055	133,968	134,019	133,774	133,612	133,343	133,467	133,806
Total HQ	4,373	4,395	4,475	4,453	4,420	4,402	4,368	4,491	4,475	4,457
Total	1,193,133	1,194,089	1,195,065	1,196,130	1,197,181	1,198,182	1,199,025	1,199,966	1,201,242	1,202,536

Phase I - Projected NYCA Net Imports (GWh)

Import (GWh)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
NYISO-PJM_SOFT	10,919	7,658	6,768	4,648	4,118	887	917	1,041	1,083	1,145
Neptune HVDC	4,146	3,881	3,851	3,764	3,808	2,954	3,104	3,254	3,353	3,449
ISONE-NYISO_SOFT	(1,007)	(1,125)	(1,291)	(1,436)	(1,471)	(637)	(709)	(711)	(677)	(748)
Cross Sound Cable	1,312	1,480	1,530	1,669	1,724	2,091	2,141	2,164	2,207	2,301
IMO-NYISO (GWH)	1,282	4,435	5,566	7,104	8,388	9,043	9,075	9,164	9,333	10,078
NYISO-HQ_CHA	4,070	4,070	4,160	4,146	4,124	4,093	4,046	4,043	4,160	4,155
NYISO-HQ_CED	189	190	193	192	191	189	189	188	193	192
LIPA Cable	761	742	749	780	792	1,033	1,044	1,049	1,060	1,134
VFT	1,637	1,510	1,487	1,326	1,280	536	528	625	664	665
HTP	-	-	717	1,410	1,501	1,076	1,081	1,214	1,374	1,503
TOTAL Imports	23,309	22,842	23,731	23,604	24,456	21,266	21,416	22,030	22,751	23,873

Phase II - Projected NYCA Net Imports (GWh)

Net Imports Metric (GWh)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
NYISO-PJM_SOFT	8,019	9,668	10,074	3,882	2,700	2,583	2,407	91	-39	-195
Neptune HVDC	3,078	3,447	3,745	3,044	2,949	3,179	3,250	2,008	2,092	2,278
Cross Sound Cable	1,344	1,399	1,491	1,954	2,035	2,073	2,041	2,186	2,259	2,361
IMO-NYISO	1,540	1,539	2,640	3,778	5,192	6,635	7,860	9,171	10,029	10,784
NYISO-HQ CHAT	4,231	4,216	4,195	4,164	4,117	4,113	4,231	4,226	4,164	4,141
NYISO-HQ CEDAR	193	192	191	189	189	188	193	192	189	189
LIPA Cable	852	854	828	1,142	1,146	1,136	1,078	1,176	1,178	1,221
VFT	1,141	1,377	1,419	627	361	410	434	-684	-633	-605
HTP	648	1,563	1,723	1,288	1,252	1,388	1,542	1,149	1,204	1,244
ISONE-NYISO_SOFT	-347	-516	-590	-141	-189	-260	-212	444	600	391
Total Net Imports	20,697	23,739	25,715	19,928	19,752	21,445	22,824	19,959	21,044	21,809
Net Imports Metric (GWh)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
NYISO-PJM_SOFT	-1,522	-3,329	-5,375	-5,694	-6,073	-8,138	-9,508	-11,858	-11,466	-10,840
Neptune HVDC	2,127	2,210	2,267	2,167	2,221	2,133	1,879	1,899	2,057	2,161
Cross Sound Cable	2,194	2,262	2,307	2,183	2,227	2,312	2,071	2,123	2,149	2,179
IMO-NYISO	10,504	10,488	11,136	11,509	11,910	12,589	13,117	13,036	13,203	13,280
NYISO-HQ CHAT	4,117	4,138	4,216	4,195	4,164	4,145	4,113	4,231	4,216	4,198
NYISO-HQ CEDAR	189	189	192	191	189	190	188	193	192	191
LIPA Cable	1,146	1,174	1,220	1,147	1,192	1,225	1,059	1,074	1,104	1,140
VFT	-673	-804	-849	-812	-865	-1,054	-1,167	-1,253	-1,159	-1,102
HTP	1,313	1,344	1,398	1,443	1,388	1,213	1,160	1,163	1,249	1,303
ISONE-NYISO_SOFT	221	-172	-424	-303	-338	-702	-448	-815	-766	-475
Total Net Imports	19,617	17,502	16,088	16,027	16,016	13,913	12,464	9,793	10,779	12,037

Phase I - Projected Generator Payments (\$M)

Generator Payment (\$M)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
WEST	1,027	1,111	1,131	1,160	1,184	1,240	1,285	1,334	1,380	1,428
GENESSEE	187	212	217	227	238	249	257	265	274	287
CENTRAL	1,202	1,369	1,406	1,476	1,543	1,637	1,692	1,751	1,817	1,896
NORTH	327	370	380	400	419	443	457	471	487	509
MOHAWKVA	122	138	143	149	155	163	169	174	181	188
CAPITAL	909	1,072	1,100	1,153	1,203	1,284	1,333	1,388	1,441	1,504
HUDSONVA	169	123	121	118	120	139	156	183	201	222
MILLWOOD	780	861	885	915	958	1,019	1,056	1,104	1,151	1,202
DUNWOODI	0	0	0	0	0	0	0	0	0	0
NYCITY	1,246	1,513	1,545	1,616	1,697	1,918	1,991	2,071	2,180	2,287
LONGISLA	491	541	560	579	609	683	711	753	795	839
Total NYCA	6,461	7,310	7,488	7,794	8,126	8,775	9,108	9,494	9,907	10,362

Phase II - Projected Generator Payments (\$M)

Generation Payment Metric (MM\$)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
WEST	793	844	903	997	1,037	1,087	1,138	1,200	1,274	1,352
GENESSEE	168	177	191	217	228	240	252	266	283	301
CENTRAL	1,161	1,228	1,319	1,525	1,605	1,685	1,766	1,894	2,009	2,150
NORTH	343	357	384	438	462	486	509	542	577	609
MOHAWKVA	115	120	129	146	154	162	170	180	191	202
CAPITAL	792	807	879	1,084	1,155	1,230	1,298	1,393	1,498	1,609
HUDSONVA	73	84	94	99	102	111	121	136	153	168
MILLWOOD	684	725	787	877	922	979	1,036	1,101	1,183	1,266
DUNWOODI	0	0	0	0	0	0	0	0	0	1
NYCITY	1,234	1,259	1,352	1,693	1,812	1,909	2,029	2,293	2,517	2,744
LONGISLA	492	505	544	611	652	692	753	902	979	1,044
Total NYCA (MM\$)	5,857	6,107	6,583	7,688	8,130	8,581	9,072	9,907	10,665	11,446
Generation Payment Metric (MM\$)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
WEST	1,423	1,478	1,683	1,779	1,873	1,945	2,018	2,066	2,155	2,261
GENESSEE	309	318	328	347	365	379	391	403	422	446
CENTRAL	2,235	2,388	2,464	2,609	2,744	2,850	2,942	3,276	3,434	3,610
NORTH	621	646	664	701	733	760	789	809	849	892
MOHAWKVA	334	380	394	415	435	453	471	486	509	532
CAPITAL	1,700	1,791	1,854	1,983	2,102	2,181	2,255	2,332	2,453	2,598
HUDSONVA	180	188	201	217	239	616	639	661	704	767
MILLWOOD	1,337	1,403	1,467	1,553	1,634	1,674	1,724	1,785	1,880	1,991
DUNWOODI	1	1	1	1	1	1	1	1	1	1
NYCITY	2,881	3,100	3,295	3,509	3,792	3,807	4,023	4,289	4,529	4,735
LONGISLA	1,182	1,254	1,341	1,502	1,605	1,668	1,846	1,947	2,073	2,230
Total NYCA (MM\$)	12,202	12,946	13,690	14,616	15,522	16,332	17,099	18,054	19,008	20,063

Phase I - Projected Load Payments (\$M)

Load Payments (\$M)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
WEST	583	661	676	705	734	761	782	800	827	855
GENESSEE	410	464	478	500	524	550	572	593	619	649
CENTRAL	670	758	779	816	853	893	921	949	984	1,024
NORTH	216	281	292	306	324	343	358	371	388	408
MOHAWKVA	312	350	362	377	394	415	429	443	461	481
CAPITAL	524	579	597	617	646	684	707	734	767	801
HUDSONVA	530	587	607	630	661	703	731	764	801	840
MILLWOOD	151	167	172	178	187	200	208	220	231	244
DUNWOODI	320	352	362	374	391	416	433	458	482	510
NYCITY	2,893	3,187	3,275	3,388	3,545	3,770	3,923	4,153	4,382	4,640
LONGISLA	1,244	1,378	1,428	1,484	1,563	1,678	1,761	1,863	1,964	2,084
Total NYCA	7,853	8,765	9,027	9,376	9,822	10,412	10,823	11,348	11,905	12,536

Phase II - Projected Load Payments (\$M)

Load Payment Metric (MM\$)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
WEST	549	577	623	706	746	788	830	874	934	998
GENESSEE	373	393	423	474	500	527	554	584	624	666
CENTRAL	594	628	680	765	808	855	903	961	1,030	1,105
NORTH	243	257	279	316	335	354	375	400	427	457
MOHAWKVA	282	298	322	360	380	402	423	448	478	510
CAPITAL	474	503	547	606	637	677	719	761	828	897
HUDSONVA	454	478	520	581	612	651	693	738	799	861
MILLWOOD	131	140	154	172	181	195	209	226	246	265
DUNWOODI	278	298	327	366	386	414	445	480	524	564
NYCITY	2,518	2,700	2,970	3,324	3,500	3,761	4,043	4,366	4,767	5,134
LONGISLA	1,122	1,196	1,315	1,479	1,562	1,674	1,773	1,887	2,051	2,241
Total NYCA (MM\$)	7,018	7,469	8,158	9,148	9,647	10,298	10,967	11,724	12,708	13,697
Load Payment Metric (MM\$)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
WEST	1,029	1,061	1,083	1,149	1,210	1,261	1,311	1,353	1,422	1,492
GENESSEE	687	707	731	777	818	850	881	910	956	1,008
CENTRAL	1,140	1,175	1,222	1,302	1,377	1,436	1,492	1,549	1,631	1,726
NORTH	469	483	500	533	562	588	609	631	662	702
MOHAWKVA	518	531	550	584	614	637	659	681	714	752
CAPITAL	956	1,013	1,059	1,135	1,212	1,257	1,306	1,362	1,445	1,540
HUDSONVA	914	964	1,013	1,079	1,144	1,178	1,221	1,272	1,347	1,432
MILLWOOD	282	298	314	334	354	364	378	394	417	444
DUNWOODI	600	633	667	709	751	773	801	835	884	941
NYCITY	5,472	5,778	6,095	6,493	6,887	7,100	7,356	7,677	8,149	8,685
LONGISLA	2,384	2,549	2,716	2,884	3,094	3,238	3,333	3,513	3,756	4,017
Total NYCA (MM\$)	14,450	15,191	15,950	16,979	18,023	18,682	19,346	20,177	21,383	22,739

Phase I - Projected LBMPs (\$/MWh)

Load LBMP (\$/MWh)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
WEST	39.9	45.4	46.7	48.9	51.2	53.4	55.3	57.0	59.2	61.4
GENESSEE	41.5	46.9	48.2	50.3	52.6	55.1	57.1	58.9	61.1	63.6
CENTRAL	42.8	48.3	49.7	51.9	54.3	57.1	59.2	61.2	63.5	66.0
NORTH	41.0	46.5	47.9	49.9	52.3	54.9	56.9	58.8	61.0	63.5
MOHAWKVA	43.8	49.3	50.7	52.8	55.3	58.2	60.3	62.4	64.8	67.4
CAPITAL	47.9	52.8	54.3	56.1	58.8	62.2	64.5	67.1	69.8	72.6
HUDSONVA	50.1	55.2	56.8	58.7	61.5	65.2	67.7	70.6	73.6	76.7
MILLWOOD	50.9	56.0	57.7	59.5	62.3	66.2	68.7	71.8	74.8	78.0
DUNWOODI	51.2	56.3	57.9	59.8	62.6	66.5	69.0	72.1	75.2	78.4
NYCITY	51.9	56.9	58.6	60.6	63.4	67.3	69.9	73.1	76.2	79.6
LONGISLA	54.4	59.9	61.7	63.9	66.9	71.0	73.9	77.3	80.6	84.3
IESO	37.9	41.7	42.8	44.6	46.5	48.3	50.0	51.7	53.5	55.5
PJM	43.6	50.3	52.1	54.9	57.6	62.4	64.7	67.4	70.0	72.8
NE	48.8	54.0	55.7	57.5	60.2	63.1	65.6	68.3	71.0	73.9

Phase II - Projected LBMP (\$/MWh)

Load Spot Price Metric (\$/MWh)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
WEST	36.54	38.46	41.61	47.34	50.13	52.92	55.69	58.53	62.53	66.80
GENESSEE	37.55	39.65	42.87	48.25	50.94	53.70	56.45	59.42	63.39	67.60
CENTRAL	38.59	40.81	44.13	49.62	52.35	55.23	58.08	61.40	65.56	69.96
NORTH	37.09	39.26	42.39	47.66	50.26	52.93	55.56	58.72	62.48	66.59
MOHAWKVA	39.37	41.67	45.06	50.54	53.29	56.22	59.11	62.54	66.75	71.23
CAPITAL	42.53	45.21	49.09	54.28	57.01	60.40	63.81	67.18	72.44	77.81
HUDSONVA	44.23	46.83	50.82	56.55	59.52	63.15	66.78	70.82	76.19	81.59
MILLWOOD	44.84	47.47	51.55	57.34	60.35	64.09	67.83	71.98	77.47	82.95
DUNWOODI	45.03	47.67	51.78	57.59	60.60	64.36	68.12	72.30	77.82	83.32
NYCITY	45.56	48.31	52.54	58.29	61.34	65.16	69.02	73.30	79.01	84.61
LONGISLA	47.77	50.74	55.22	61.75	65.05	69.09	72.57	76.39	82.11	88.46
IESO	33.75	35.63	38.24	43.17	45.50	47.78	50.09	52.19	55.43	58.91
PJM	38.89	40.90	44.59	51.50	55.10	58.51	62.01	67.87	72.73	77.94
NE	44.31	47.12	51.28	56.37	59.32	62.96	66.54	69.89	75.19	80.82
Load Spot Price Metric (\$/MWh)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
WEST	68.87	71.01	72.48	76.90	80.94	84.28	87.56	90.35	94.76	99.42
GENESSEE	69.61	71.58	73.91	78.35	82.37	85.39	88.34	91.13	95.42	100.38
CENTRAL	71.92	73.84	76.45	81.10	85.35	88.53	91.60	94.55	99.05	104.30
NORTH	68.12	69.62	72.07	76.39	80.27	83.31	86.10	88.79	92.83	97.74
MOHAWKVA	72.36	74.19	76.88	81.53	85.76	88.87	91.87	94.77	99.28	104.58
CAPITAL	82.27	86.48	89.90	95.58	101.08	104.05	107.29	111.04	116.94	123.63
HUDSONVA	86.07	90.15	94.25	99.78	105.09	107.69	111.08	115.01	121.05	127.85
MILLWOOD	87.63	91.85	96.20	101.76	107.11	109.64	113.05	117.09	123.30	130.25
DUNWOODI	88.02	92.26	96.64	102.22	107.58	110.13	113.53	117.59	123.83	130.83
NYCITY	89.51	93.89	98.39	104.18	109.75	112.55	115.98	120.26	126.80	134.11
LONGISLA	92.81	97.85	102.86	107.76	113.90	117.54	119.40	124.07	130.81	137.76
IESO	61.23	63.27	65.54	69.18	72.61	74.86	76.99	79.43	82.77	86.90
PJM	82.72	87.26	92.04	97.40	102.50	107.04	111.56	116.64	121.91	127.50
NE	85.61	90.10	94.14	99.74	105.24	108.36	111.72	115.91	121.96	128.50

Phase I- Projected SO₂ Emissions (Tons)

SOx Emissions (Tons)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
WEST	20,616.7	16,098.4	15,502.4	14,119.5	13,051.5	13,627.4	13,725.9	13,779.0	13,741.1	13,418.4
GENESSEE	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
CENTRAL	1,357.1	235.9	247.0	220.4	200.4	226.7	244.6	279.0	302.7	318.9
NORTH	353.7	388.8	414.8	412.3	445.7	559.8	577.3	592.9	600.2	554.0
MOHAWKVA	36.9	3.3	3.3	8.2	8.1	3.3	3.3	3.2	3.2	8.1
CAPITAL	66.2	71.6	71.4	72.8	72.2	73.5	73.7	74.0	74.1	74.4
HUDSONVA	11,314.5	6,045.8	5,839.7	5,054.3	4,776.5	5,543.1	6,142.1	7,254.1	7,765.3	8,235.7
MILLWOOD	12.2	12.3	12.2	12.2	12.2	12.3	12.2	12.2	12.2	12.3
DUNWOODI	-	-	-	-	-	-	-	-	-	-
NYCITY	233.8	290.9	289.3	293.5	292.3	319.1	315.0	307.2	313.6	313.4
LONGISLA	5,825.3	5,914.3	5,927.7	5,878.2	5,848.5	6,407.9	6,355.3	6,426.1	6,509.1	6,589.7
Total NYCA	39,817	29,062	28,308	26,072	24,708	26,773	27,450	28,728	29,322	29,525

Phase II - Projected SO₂ Emissions (Tons)

SOX Amount Metric (tons)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
WEST	8,195	9,322	8,500	6,375	5,171	4,846	4,685	4,978	5,042	5,103
GENESSEE	1	1	0	1	1	1	1	1	0	0
CENTRAL	128	171	171	268	222	233	238	298	330	403
NORTH	1,036	757	716	197	214	206	207	239	218	169
MOHAWKVA	4	4	4	4	4	4	4	4	4	4
CAPITAL	67	64	64	72	73	74	74	76	76	75
HUDSONVA	4,112	4,693	4,842	4,226	3,942	4,143	4,224	4,553	4,877	5,287
MILLWOOD	12	12	12	12	12	12	12	12	12	12
DUNWOODI	0	0	0	0	0	0	0	0	0	0
NYCITY	263	252	244	283	287	277	276	299	299	293
LONGISLA	7,874	7,531	7,245	6,539	6,600	6,663	5,828	5,701	5,653	5,478
Total NYCA (tons)	21,692	22,807	21,799	17,977	16,527	16,458	15,548	16,160	16,511	16,825
SOX Amount Metric (tons)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
WEST	4,507	4,019	3,411	3,446	3,377	3,215	3,132	2,996	3,382	3,469
GENESSEE	0	0	0	0	0	0	0	0	0	0
CENTRAL	311	267	244	270	276	248	240	224	261	294
NORTH	111	87	99	99	75	71	103	92	117	111
MOHAWKVA	3	3	3	3	3	3	3	3	3	3
CAPITAL	75	75	75	75	75	75	76	75	75	76
HUDSONVA	5,412	5,369	5,399	5,765	6,269	5,428	5,045	4,924	5,463	6,041
MILLWOOD	12	12	12	12	12	12	12	12	12	12
DUNWOODI	0	0	0	0	0	0	0	0	0	0
NYCITY	289	288	296	301	298	291	298	298	295	290
LONGISLA	4,954	4,944	5,064	4,532	4,466	4,451	4,030	4,055	4,139	4,027
Total NYCA (tons)	15,675	15,064	14,604	14,504	14,853	13,794	12,939	12,680	13,749	14,323

Phase I - Projected SO₂ Emission Costs (\$M)

SOx Emission Costs (\$M)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
WEST	2.06	4.83	4.77	4.45	4.22	4.51	4.66	4.79	4.90	4.90
GENESSEE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CENTRAL	0.14	0.07	0.08	0.07	0.06	0.08	0.08	0.10	0.11	0.12
NORTH	0.04	0.12	0.13	0.13	0.14	0.19	0.20	0.21	0.21	0.20
MOHAWKVA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAPITAL	0.01	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03
HUDSONVA	1.13	1.81	1.80	1.59	1.54	1.84	2.08	2.52	2.77	3.01
MILLWOOD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DUNWOODI	-	-	-	-	-	-	-	-	-	-
NYCITY	0.02	0.09	0.09	0.09	0.09	0.11	0.11	0.11	0.11	0.11
LONGISLA	0.58	1.77	1.82	1.85	1.89	2.12	2.16	2.24	2.32	2.41
Total NYCA	3.98	8.72	8.70	8.22	7.98	8.87	9.32	9.99	10.46	10.79

Phase II - Projected SO₂ Emission Costs (\$M)

SOX Cost Metric (MM\$)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
WEST	0.0	0.0	0.0	8.4	7.3	7.3	7.5	8.4	9.0	9.6
GENESSEE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CENTRAL	0.0	0.0	0.0	0.4	0.3	0.4	0.4	0.5	0.6	0.8
NORTH	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.4	0.4	0.3
MOHAWKVA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CAPITAL	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
HUDSONVA	0.0	0.0	0.0	5.6	5.6	6.2	6.8	7.7	8.7	10.0
MILLWOOD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNWOODI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NYCITY	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.5	0.5	0.6
LONGISLA	0.0	0.0	0.0	8.6	9.3	10.0	9.3	9.7	10.1	10.3
NYCA Total	0.1	0.1	0.1	23.6	23.3	24.8	24.9	27.4	29.6	31.7
SOX Cost Metric (MM\$)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
WEST	8.9	8.3	7.4	7.8	8.0	7.9	8.0	7.9	9.3	9.8
GENESSEE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CENTRAL	0.6	0.6	0.5	0.6	0.7	0.6	0.6	0.6	0.7	0.8
NORTH	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3
MOHAWKVA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CAPITAL	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
HUDSONVA	10.7	11.1	11.7	13.1	14.8	13.3	12.9	13.0	15.0	17.1
MILLWOOD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNWOODI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NYCITY	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.8
LONGISLA	9.8	10.3	11.0	10.3	10.5	10.9	10.3	10.7	11.4	11.4
NYCA Total	31.1	31.3	31.7	32.9	35.1	33.9	33.0	33.6	37.7	40.6

Phase I - Projected NOx Emissions (Tons)

NOx Emissions (Tons)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
WEST	10,130	9,130	8,974	8,646	8,108	8,134	8,225	8,376	8,347	8,264
GENESSEE	6	7	6	7	7	6	6	6	6	6
CENTRAL	2,348	1,418	1,437	1,411	1,360	1,436	1,473	1,541	1,592	1,612
NORTH	393	396	396	400	402	409	408	407	405	405
MOHAWKVA	227	228	226	229	228	227	225	223	222	222
CAPITAL	920	966	961	972	942	931	928	926	927	926
HUDSONVA	3,635	2,109	2,003	1,795	1,720	1,983	2,197	2,552	2,728	2,919
MILLWOOD	1,046	1,049	1,046	1,046	1,046	1,049	1,046	1,046	1,046	1,050
DUNWOODI	-	-	-	-	-	-	-	-	-	-
NYCITY	2,359	2,545	2,483	2,518	2,521	2,799	2,797	2,753	2,799	2,803
LONGISLA	5,687	5,743	5,764	5,738	5,738	6,021	5,996	6,034	6,089	6,127
Total NYCA	26,753	23,591	23,299	22,762	22,072	22,995	23,302	23,864	24,160	24,334

Phase II - Projected NOx Emissions (Tons)

NOX Amount Metric (tons)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
WEST	6,942	7,117	6,933	6,580	6,346	6,259	6,208	6,268	6,213	6,143
GENESSEE	12	11	10	12	11	11	9	11	9	8
CENTRAL	1,294	1,363	1,323	1,614	1,533	1,543	1,553	1,717	1,774	1,915
NORTH	449	429	424	420	422	419	418	422	424	416
MOHAWKVA	289	269	258	286	284	274	268	271	266	255
CAPITAL	953	923	884	933	943	944	946	967	964	957
HUDSONVA	1,340	1,513	1,569	1,433	1,374	1,441	1,489	1,613	1,711	1,801
MILLWOOD	1,046	1,046	1,046	1,049	1,046	1,046	1,046	1,050	1,046	1,046
DUNWOODI	0	0	0	0	0	0	0	0	0	0
NYCITY	2,825	2,688	2,625	3,122	3,195	3,150	3,146	3,456	3,503	3,418
LONGISLA	6,624	6,415	6,311	6,217	6,259	6,246	5,908	5,935	5,912	5,831
Total NYCA (tons)	21,774	21,774	21,383	21,666	21,413	21,335	20,992	21,710	21,823	21,789

NOX Amount Metric (tons)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
WEST	5,895	5,675	5,504	5,529	5,508	5,433	5,389	5,293	5,379	5,431
GENESSEE	7	7	9	8	7	6	6	6	8	8
CENTRAL	1,673	1,557	1,511	1,563	1,575	1,532	1,535	1,547	1,619	1,678
NORTH	402	392	388	387	383	381	385	381	383	382
MOHAWKVA	238	230	230	227	225	224	226	224	225	224
CAPITAL	951	946	939	943	944	948	958	953	947	948
HUDSONVA	1,835	1,826	1,859	1,951	2,084	1,891	1,808	1,778	1,933	2,134
MILLWOOD	1,046	1,049	1,046	1,046	1,046	1,049	1,046	1,046	1,046	1,049
DUNWOODI	0	0	0	0	0	0	0	0	0	0
NYCITY	3,356	3,293	3,329	3,329	3,356	3,286	3,397	3,370	3,376	3,348
LONGISLA	5,585	5,595	5,653	5,395	5,376	5,376	5,196	5,223	5,253	5,230
Total NYCA (tons)	20,989	20,570	20,467	20,379	20,503	20,126	19,947	19,819	20,171	20,432

Phase I Projected NOx Emission Costs (\$M)

NOx Emission Costs (\$M)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
WEST	6.1	7.3	9.9	13.8	13.0	13.0	13.2	13.4	13.5	13.7
GENESSEE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CENTRAL	1.4	1.1	1.6	2.3	2.2	2.3	2.4	2.5	2.6	2.7
NORTH	0.2	0.3	0.4	0.6	0.6	0.7	0.7	0.7	0.7	0.7
MOHAWKVA	0.1	0.2	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4
CAPITAL	0.6	0.8	1.1	1.6	1.5	1.5	1.5	1.5	1.5	1.5
HUDSONVA	2.2	1.7	2.2	2.9	2.8	3.2	3.5	4.1	4.4	4.8
MILLWOOD	0.6	0.8	1.2	1.7	1.7	1.7	1.7	1.7	1.7	1.7
DUNWOODI	-	-	-	-	-	-	-	-	-	-
NYCITY	1.4	2.0	2.7	4.0	4.0	4.5	4.5	4.4	4.5	4.6
LONGISLA	3.4	4.6	6.3	9.2	9.2	9.6	9.6	9.7	9.8	10.1
Total NYCA	16	19	26	36	35	37	37	38	39	40

Phase II - Projected NOx Emission Costs (\$M)

NOX Cost Metric (MM\$)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
WEST	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.8
GENESSEE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CENTRAL	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2
NORTH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
MOHAWKVA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CAPITAL	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
HUDSONVA	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
MILLWOOD	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
DUNWOODI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NYCITY	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4
LONGISLA	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7
NYCA Total	1.7	1.8	1.9	2.0	2.1	2.2	2.2	2.4	2.6	2.7

NOX Cost Metric (MM\$)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
WEST	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	1.0	1.0
GENESSEE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CENTRAL	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
NORTH	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
MOHAWKVA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CAPITAL	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
HUDSONVA	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
MILLWOOD	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
DUNWOODI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NYCITY	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
LONGISLA	0.7	0.8	0.8	0.8	0.8	0.9	0.8	0.9	0.9	1.0
NYCA Total	2.8	2.8	2.9	3.1	3.2	3.2	3.3	3.3	3.6	3.8

Phase I - Projected CO₂ Emissions (1,000 Tons)

CO ₂ Emissions (1000 Tons)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
WEST	10,464	9,090	8,897	8,452	7,832	7,919	8,026	8,190	8,167	8,057
GENESSEE	3	5	4	5	5	3	3	3	2	3
CENTRAL	3,830	3,342	3,353	3,450	3,383	3,526	3,546	3,570	3,600	3,596
NORTH	112	121	118	147	153	172	165	152	139	146
MOHAWKVA	37	30	28	32	30	29	27	25	23	24
CAPITAL	7,551	8,148	8,134	8,263	8,232	8,305	8,318	8,350	8,349	8,385
HUDSONVA	2,570	1,440	1,377	1,223	1,164	1,340	1,484	1,736	1,860	1,982
MILLWOOD	-	-	-	-	-	-	-	-	-	-
DUNWOODI	-	-	-	-	-	-	-	-	-	-
NYCITY	11,710	12,986	12,830	12,996	13,035	14,016	13,999	13,873	14,016	14,060
LONGISLA	4,479	4,564	4,612	4,584	4,598	4,939	4,923	4,963	5,041	5,062
Total NYCA	40,758	39,725	39,353	39,153	38,431	40,251	40,490	40,861	41,198	41,314

Phase II - Projected CO₂ Emissions (1,000 Tons)

CO2 Amount Metric (1000 tons)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
WEST	6,730	7,013	6,760	6,222	5,888	5,780	5,720	5,808	5,775	5,722
GENESSEE	18	14	13	19	19	17	15	16	12	9
CENTRAL	3,457	3,433	3,302	3,809	3,764	3,718	3,692	3,934	3,927	4,019
NORTH	345	269	245	335	344	328	318	341	361	316
MOHAWKVA	95	75	62	93	90	80	73	77	72	60
CAPITAL	7,481	7,140	7,144	8,112	8,239	8,294	8,297	8,461	8,458	8,450
HUDSONVA	953	1,082	1,121	1,008	960	1,004	1,035	1,124	1,197	1,270
MILLWOOD	0	0	0	0	0	0	0	0	0	0
DUNWOODI	0	0	0	0	0	0	0	0	0	0
NYCITY	13,696	13,121	12,861	14,738	14,991	14,800	14,826	15,866	16,149	16,271
LONGISLA	5,446	5,211	5,106	5,124	5,201	5,184	5,290	5,893	5,918	5,840
Total NYCA (1000 tons)	38,221	37,358	36,615	39,460	39,495	39,205	39,266	41,520	41,869	41,958
CO2 Amount Metric (1000 tons)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
WEST	5,439	5,192	5,941	5,944	5,940	5,888	5,892	5,798	5,864	5,877
GENESSEE	6	5	9	7	4	2	2	3	8	6
CENTRAL	3,609	3,363	3,323	3,349	3,363	3,356	3,381	4,457	4,480	4,473
NORTH	229	162	130	122	104	93	113	84	96	87
MOHAWKVA	40	32	31	28	25	25	27	24	25	24
CAPITAL	8,451	8,445	8,405	8,442	8,458	8,508	8,530	8,496	8,485	8,499
HUDSONVA	1,296	1,286	1,311	1,379	1,481	2,712	2,680	2,662	2,759	2,903
MILLWOOD	0	0	0	0	0	0	0	0	0	0
DUNWOODI	0	0	0	0	0	0	0	0	0	0
NYCITY	16,119	16,404	16,651	16,763	17,081	16,733	17,245	17,661	17,691	17,416
LONGISLA	6,116	6,156	6,267	6,492	6,535	6,589	7,007	7,107	7,166	7,300
Total NYCA (1000 tons)	41,305	41,045	42,067	42,527	42,992	43,905	44,877	46,291	46,574	46,585

Phase I - Projected CO₂ Emission Costs (\$M)

CO ₂ Emission Costs (\$M)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
WEST	22.4	90.9	109.0	122.6	131.2	150.5	164.0	179.9	192.7	204.4
GENESSEE	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1
CENTRAL	8.2	33.4	41.1	50.0	56.7	67.0	72.4	78.4	85.0	91.2
NORTH	0.2	1.2	1.4	2.1	2.6	3.3	3.4	3.3	3.3	3.7
MOHAWKVA	0.1	0.3	0.3	0.5	0.5	0.6	0.6	0.5	0.5	0.6
CAPITAL	16.2	81.5	99.6	119.8	137.9	157.8	169.9	183.4	197.0	212.7
HUDSONVA	5.5	14.4	16.9	17.7	19.5	25.5	30.3	38.1	43.9	50.3
MILLWOOD	-	-	-	-	-	-	-	-	-	-
DUNWOODI	-	-	-	-	-	-	-	-	-	-
NYCITY	25.1	129.9	157.2	188.4	218.3	266.3	286.0	304.6	330.8	356.7
LONGISLA	9.6	45.6	56.5	66.5	77.0	93.8	100.6	109.0	119.0	128.4
Total NYCA	87	397	482	568	644	765	827	897	972	1,048

Phase II - Projected CO₂ Emission Costs (\$M)

CO2 Cost Metric (MM\$)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
WEST	13	13	28	39	50	62	73	87	103	119
GENESSEE	0	0	0	0	0	0	0	0	0	0
CENTRAL	7	7	14	24	32	40	47	59	70	84
NORTH	1	1	1	2	3	3	4	5	6	7
MOHAWKVA	0	0	0	1	1	1	1	1	1	1
CAPITAL	14	14	29	51	70	88	106	127	152	176
HUDSONVA	2	2	5	6	8	11	13	17	21	26
MILLWOOD	0	0	0	0	0	0	0	0	0	0
DUNWOODI	0	0	0	0	0	0	0	0	0	0
NYCITY	26	25	53	92	127	157	190	238	289	339
LONGISLA	10	10	21	32	44	55	68	88	106	122
Total NYCA	73	71	150	247	334	417	503	623	750	874

CO2 Cost Metric (MM\$)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
WEST	129	138	176	193	210	226	243	256	276	294
GENESSEE	0	0	0	0	0	0	0	0	0	0
CENTRAL	86	90	98	109	119	129	139	197	211	224
NORTH	5	4	4	4	4	4	5	4	5	4
MOHAWKVA	1	1	1	1	1	1	1	1	1	1
CAPITAL	201	225	249	274	300	326	352	375	399	425
HUDSONVA	31	34	39	45	52	104	111	118	130	145
MILLWOOD	0	0	0	0	0	0	0	0	0	0
DUNWOODI	0	0	0	0	0	0	0	0	0	0
NYCITY	383	437	493	545	605	641	711	780	833	871
LONGISLA	145	164	185	211	231	253	289	314	337	365
Total NYCA	981	1,095	1,244	1,382	1,523	1,683	1,851	2,045	2,193	2,329

Phase I - Projected Load Payments Loss Component (\$M)

Loss Costs (\$M)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
WEST	(39)	(35)	(35)	(35)	(35)	(44)	(46)	(48)	(50)	(52)
GENESSEE	(9)	(9)	(9)	(8)	(9)	(12)	(12)	(13)	(13)	(14)
CENTRAL	5	8	9	10	10	9	9	9	10	10
NORTH	(2)	(1)	(1)	(1)	(1)	(2)	(2)	(1)	(1)	(1)
MOHAWKVA	10	12	12	13	13	14	14	14	15	16
CAPITAL	21	22	22	23	25	28	29	29	31	32
HUDSONVA	38	42	43	45	47	52	54	57	59	62
MILLWOOD	12	13	14	14	15	17	18	18	19	21
DUNWOODI	26	28	29	30	31	35	36	38	40	42
NYCITY	246	263	269	280	290	327	340	359	379	403
LONGISLA	110	119	123	129	135	151	158	167	177	189
Total NYCA	418	462	476	500	523	575	599	631	665	707

Phase II - Projected Load Payments Loss Component (\$M)

Loss Metric (MM\$)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
WEST	-26	-31	-33	-27	-26	-27	-28	-37	-40	-43
GENESSEE	-6	-7	-8	-7	-7	-7	-8	-11	-12	-13
CENTRAL	6	5	6	9	10	11	12	12	13	13
NORTH	-2	-2	-2	-2	-2	-2	-3	-4	-4	-5
MOHAWKVA	9	10	11	12	13	14	14	15	16	17
CAPITAL	20	22	24	26	26	28	29	32	35	38
HUDSONVA	33	35	38	43	45	48	51	57	62	66
MILLWOOD	11	12	13	14	15	16	17	20	21	23
DUNWOODI	23	25	27	30	31	33	36	41	44	48
NYCITY	214	233	253	284	295	315	336	387	420	452
LONGISLA	99	108	118	132	137	147	155	174	190	208
Total NYCA	381	409	447	513	538	575	613	686	745	804
Loss Metric (MM\$)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
WEST	-43	-43	-53	-56	-60	-59	-59	-57	-60	-66
GENESSEE	-13	-13	-14	-15	-16	-16	-16	-16	-16	-18
CENTRAL	13	11	11	12	13	14	16	13	13	14
NORTH	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
MOHAWKVA	10	9	9	10	11	11	11	11	12	13
CAPITAL	41	44	46	50	53	55	57	61	65	69
HUDSONVA	72	75	79	84	89	91	94	99	104	111
MILLWOOD	25	26	27	29	31	32	33	34	36	39
DUNWOODI	52	54	57	61	64	66	68	71	76	81
NYCITY	488	514	540	573	607	629	646	679	718	767
LONGISLA	227	243	258	272	293	307	305	325	348	375
Total NYCA	868	916	956	1,014	1,079	1,125	1,149	1,217	1,291	1,379

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