

January 2019 Interest Rates

Issue Date	Amount of Debtentures (\$0)	Debtenture Rate (%)	Note Rate (%)	Comparable Treasury Market Rate (%)	Spread Over Treasury Rate (%)	CDC Fee Borrower Fee CSA Fee	0.625	1.000	0.625	1.000	0.625	1.000	0.625	1.000	0.625	1.000	0.625	1.000	0.625	1.000	0.625	1.000	
							0.9375	0.9375	0.914	0.914	0.697	0.697	0.642	0.642	0.368	0.368	0.625	1.000	0.625	1.000	0.625	1.000	0.625
							0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100
10-Year Debtentures														Refinance									
Jan 17	7,325	2.42	2.51256	1.88	0.54		4.950	5.500	4.916	N/A	4.598	5.148	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mar 17	14,862	2.63	2.73012	2.11	0.52		5.170	5.720	5.135	5.685	4.817	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.867	N/A	N/A	N/A	N/A
May 17	17,713	2.33	2.41974	1.92	0.41		4.868	5.420	4.833	5.385	4.514	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
July 17	13,552	2.32	2.40909	1.95	0.37		4.850	5.401	4.816	5.366	4.497	5.048	N/A	N/A	N/A	N/A	N/A	N/A	5.431	4.547	N/A	N/A	N/A
Sept 17	11,457	1.98	2.05698	1.63	0.35		4.506	5.059	4.471	5.024	4.152	4.704	N/A	N/A	N/A	N/A	N/A	N/A	4.202	N/A	N/A	N/A	N/A
Nov 17	22,237	2.29	2.37819	2.02	0.27		N/A	5.376	4.790	5.341	4.470	5.022	N/A	N/A	N/A	N/A	N/A	N/A	4.520	5.072	N/A	N/A	N/A
Jan 18	12,628	2.55	2.64746	2.33	0.22		5.091	5.643	5.057	5.608	4.738	5.289	4.657	5.208	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mar 18	15,380	3.00	3.11270	2.63	0.37		N/A	N/A	5.510	N/A	5.192	5.741	5.112	N/A	N/A	N/A	N/A	N/A	5.242	N/A	5.171	N/A	N/A
May 18	22,720	3.18	3.29883	2.81	0.37		5.730	6.278	5.695	6.244	5.378	5.927	5.298	5.847	N/A	N/A	N/A	N/A	5.428	N/A	5.356	5.905	N/A
July 18	9,642	3.19	3.30867	2.73	0.46		5.732	N/A	5.698	6.245	5.382	5.929	5.302	5.848	N/A	N/A	N/A	N/A	N/A	N/A	5.360	5.907	N/A
Sept 18	14,550	3.14	3.25713	2.76	0.38		N/A	6.230	5.649	6.196	5.332	5.879	5.252	5.799	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nov 18	7,101	3.47	3.59817	3.07	0.40		N/A	N/A	5.987	N/A	5.670	N/A	5.590	6.137	N/A	N/A	N/A	N/A	N/A	N/A	5.649	N/A	N/A
Jan 19	11,713	2.95	3.06111	2.54	0.41		5.496	N/A	N/A	N/A	5.144	5.693	5.064	5.613	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
20-Year Debtentures														Refinance									
Jan 17	276,384	2.80	2.84789	2.40	0.40		4.879	5.337	4.850	5.308	4.585	5.043	N/A	N/A	N/A	N/A	N/A	N/A	4.904	5.362	4.626	N/A	N/A
Feb 17	360,199	2.82	2.86826	2.38	0.44		4.901	5.360	4.872	5.331	4.607	5.066	N/A	N/A	N/A	N/A	N/A	N/A	4.926	5.385	4.649	5.107	N/A
Mar 17	333,267	3.04	3.09120	2.58	0.46		5.121	5.579	5.092	5.550	4.827	5.285	N/A	N/A	N/A	N/A	N/A	N/A	5.146	N/A	4.869	N/A	N/A
April 17	310,817	2.84	2.88846	2.35	0.49		4.919	5.377	4.891	5.349	4.625	5.084	N/A	N/A	N/A	N/A	N/A	N/A	4.944	N/A	4.667	N/A	N/A
May 17	361,901	2.88	2.92925	2.39	0.49		4.962	5.421	4.934	5.392	4.668	5.127	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.446	4.710	5.168	N/A
June 17	338,673	2.81	2.85812	2.20	0.61		4.891	5.349	4.862	5.320	4.596	5.055	N/A	N/A	N/A	N/A	N/A	N/A	4.916	N/A	4.638	5.097	N/A
July 17	305,239	2.98	3.03041	2.38	0.60		5.059	5.517	5.031	5.488	4.766	5.223	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.807	5.265	N/A
Aug 17	356,964	2.75	2.79734	2.22	0.53		4.832	5.291	4.803	5.262	4.537	4.996	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.579	5.038	N/A
Sept 17	333,569	2.59	2.63502	2.05	0.54		4.670	5.129	4.641	5.100	4.376	4.835	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.417	4.876	N/A
Oct 17	262,864	2.85	2.89859	2.34	0.51		4.929	5.387	4.900	5.358	4.635	5.093	N/A	N/A	N/A	N/A	N/A	N/A	4.954	N/A	4.676	N/A	N/A
Nov 17	351,575	2.79	2.83785	2.34	0.45		4.871	5.330	4.842	5.301	4.577	5.036	4.510	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.618	5.077	N/A
Dec 17	275,056	2.78	2.82766	2.33	0.45		4.860	N/A	4.831	5.290	4.566	5.024	4.499	4.957	N/A	N/A	N/A	N/A	N/A	N/A	4.607	5.066	N/A
Jan 18	265,812	2.92	2.96978	2.56	0.36		5.002	5.461	4.974	5.432	4.708	5.167	4.641	5.100	N/A	N/A	N/A	N/A	N/A	N/A	4.750	N/A	4.690
Feb 18	324,595	3.22	3.27350	2.87	0.35		5.300	5.757	5.272	5.729	5.007	5.464	4.940	5.397	N/A	N/A	N/A	N/A	N/A	N/A	5.048	5.506	4.989
Mar 18	282,611	3.20	3.25328	2.85	0.35		5.281	5.738	5.252	5.709	4.987	5.445	4.920	5.378	N/A	N/A	N/A	N/A	N/A	N/A	5.029	N/A	4.969
April 18	329,067	3.31	3.36454	2.82	0.49		5.389	5.845	5.360	5.817	5.096	5.552	5.029	5.486	N/A	N/A	N/A	N/A	N/A	N/A	5.137	N/A	5.078
May 18	375,113	3.50	3.55703	2.96	0.54		5.582	6.038	5.553	6.010	5.289	5.745	5.222	5.678	N/A	N/A	N/A	N/A	N/A	N/A	5.330	5.787	5.270
June 18	307,029	3.60	3.65812	2.97	0.63		5.680	6.136	5.651	6.107	5.387	5.843	5.320	5.776	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.369	5.825
July 18	263,122	3.54	3.59736	2.83	0.71		5.618	6.074	5.590	6.046	5.326	5.782	5.259	5.715	N/A	N/A	N/A	N/A	5.643	N/A	N/A	N/A	5.308
Aug 18	344,334	3.58	3.63801	2.94	0.64		5.661	N/A	5.632	6.089	5.368	5.824	5.301	5.758	N/A	N/A	N/A	N/A	N/A	N/A	5.410	N/A	5.350
Sept 18	278,852	3.53	3.58727	2.89	0.64		5.609	6.065	5.580	6.037	5.317	5.773	5.250	5.706	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.298	5.754
Oct 18	259,791	3.77	3.83031	3.18	0.59		5.852	6.308	5.823	6.279	5.559	6.015	5.492	5.948	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.541	5.997
Nov 18	248,506	3.87	3.93129	3.22	0.65		5.950	6.405	5.921	6.376	5.658	6.113	5.591	6.046	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.640	6.095
Dec 18	244,169	3.54	3.59738	2.84	0.70		5.619	N/A	5.590	6.046	5.327	5.783	5.260	5.716	4.926	5.382	N/A	N/A	N/A	N/A	N/A	5.308	N/A
Jan 19	231,767	3.37	3.42549	2.71	0.66		5.452	5.9087	5.423	N/A	5.159	5.616	5.092	5.549	4.758	5.215	N/A	N/A	N/A	N/A	N/A	5.140	N/A
25-Year Debtentures														Refinance									
July 18	27,536	3.68	3.72405	2.83	0.85		N/A	N/A	N/A	N/A	N/A	N/A	5.320	5.758	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Aug 18	29,238	3.71	3.75439	2.94	0.77		N/A	N/A	N/A	N/A	N/A	N/A	5.351	5.789	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.398	N/A
Sept 18	58,273	3.65	3.69390	2.89	0.76		N/A	N/A	N/A	N/A	N/A	N/A	5.290	5.728	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.337	N/A
Oct 18	79,913	3.89	3.93581	3.18	0.71		N/A	N/A	N/A	N/A	N/A	N/A	5.532	5.969	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.578	6.016
Nov 18	67,600	4.00	4.04654	3.22	0.78		N/A	N/A	N/A	N/A	N/A	N/A	5.640	6.077	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.687	N/A
Dec 18	80,771	3.67	3.71400	2.84	0.83		N/A	N/A	N/A	N/A	N/A	N/A	5.310	5.748	4.990	5.428	N/A	N/A	N/A	N/A	N/A	5.357	N/A
Jan 19	110,764	3.56	3.60326	2.71	0.85		N/A	N/A	N/A	N/A	N/A	N/A	5.202	5.641	4.881	5.320	N/A	N/A	N/A	N/A	N/A	5.249	5.687