SCHEDULE 4 – AVERAGE INCREMENTAL COST

Estimated Marginal Energy Costs (\$/MWh)						
		2021	2022	2023	2024	2025
Summer	On Peak	30.19	28.97	26.92	28.73	30.12
	Off Peak	19.95	19.32	19.02	20.76	21.87
	All Hours	24.66	23.76	22.65	24.42	25.66
Winter	On Peak	28.78	30.21	28.97	29.97	31.02
	Off Peak	21.89	22.26	21.31	22.82	23.75
	All Hours	25.06	25.92	24.83	26.11	27.09
Annual	On Peak	29.48	29.59	27.94	29.35	30.57
	Off Peak	20.92	20.79	20.16	21.79	22.81
	All Hours	24.86	24.84	23.74	25.27	26.38
Annual # hours on-peak:						

Description of season and on-peak and off-peak periods				
Summer:	April through September			
Winter:	October through March			
On-peak period:	6 am to 10 pm Monday through Friday except holiday (New Years, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, Christmas Day)			
Off-peak period:	All other hours			

Estimated Marginal Energy Costs

The estimated system average incremental energy costs are calculated by seasonal peak and off-peak periods for each of the next five years. For each seasonal period, system incremental energy costs are averaged during system daily peak hours, system daily off-peak hours, and all hours in the season. The energy costs are increased by a factor equal to 50 percent of the line losses.

The energy needs of Rochester Public Utilities (RPU) are served through its membership in Southern Minnesota Municipal Power Agency (SMMPA). SMMPA, in turn, is a member of the Midcontinent ISO (MISO). As a result, the municipal's incremental energy cost is equivalent to the MISO hourly Locational Marginal Price (LMP). Actual hourly LMP will vary significantly based on several parameters such as weather, energy demand, and generation availability. The table above represents a forecast of the MISO hourly LMP values averaged over each specific time period at the MISO Minnesota Hub.

Capacity Costs

SMMPA, RPU's wholesale supplier, has neither planned generating facility additions nor planned additional capacity purchases, other than from qualifying facilities, thus SMMPA and RPU are deemed to have no avoidable capacity costs.