



APPENDIX B

Power Supply Resources

2023-2037 INTEGRATED RESOURCE PLAN

Submitted to the Minnesota Public Utilities Commission

Docket No. **ET-2/RP-22-75**

March 31st, 2023

Appendix B – Power Supply Resources

GRE 2023-37 IRP

Docket ET-2/RP-22-75

GRE's current generation portfolio includes natural gas, oil, hydro, wind and coal resources. Table 1 shows GRE's owned resources while Table 2 shows power purchase agreement (PPA) resources.

Table 1 GRE Power Supply Resources (owned)

Generation Facility	Location	Unit #	Make	Model(s)	Primary Fuel	Secondary Fuel
Arrowhead Emergency Station	Colvill, MN	N/A	Cummins	Reciprocating Engines	FO	-
Cambridge Station	Cambridge, MN	1	GE	MS5001	FO	-
Cambridge Station	Cambridge, MN	2	Siemens	SGT6-4000F (V84)	NG	-
Elk River Peaking Station	Elk River, MN	11	Siemens	SGT6-5000F4(A)	NG	FO
Lakefield Junction Station	Trimont, MN	1	GE	MS7001EA	NG	FO
Lakefield Junction Station	Trimont, MN	2	GE	MS7001EA	NG	FO
Lakefield Junction Station	Trimont, MN	3	GE	MS7001EA	NG	FO
Lakefield Junction Station	Trimont, MN	4	GE	MS7001EA	NG	FO
Lakefield Junction Station	Trimont, MN	5	GE	MS7001EA	NG	FO
Lakefield Junction Station	Trimont, MN	6	GE	MS7001EA	NG	FO
Lakefield Junction Station	Trimont, MN	D	Caterpillar	Caterpillar	FO	-
Maple Lake Station	Maple Lake, MN	1	GE	MS5001	FO	-
Pleasant Valley Station	Dexter, MN	11	Siemens	SGT6-4000F (V84.3A(2))	NG	FO
Pleasant Valley Station	Dexter, MN	12	Siemens	SGT6-4000F (V84.3A(2))	NG	FO
Pleasant Valley Station	Dexter, MN	13	Siemens	Westinghouse D501D5A	NG	FO
Rock Lake Station	Pine City, MN	1	GE	MS5001	FO	-
St. Bonifacius Station	Saint Bonifacius, MN	1	P&W	Twin FT4C3	FO	-
Spiritwood Station	Spiritwood, ND	1	Siemens	CHP	Coal	NG

Table 2 GRE Power Purchase Agreements

Power Purchase Agreement Resources
Ashtabula II Wind
Elm Creek Wind
Endeavor I Wind
Emmons-Logan Wind
Prairie Star Wind
Trimont Wind
Rainbow Energy Center, LLC
Manitoba Hydro
Deuel Harvest Wind (2023)
Buffalo Ridge Wind (2023)

Physical and financial characteristics of the existing fleet are presented on the following pages.

[TRADE SECRET BEGIN]

Table 3 Existing Thermal Resources: Operating Characteristics

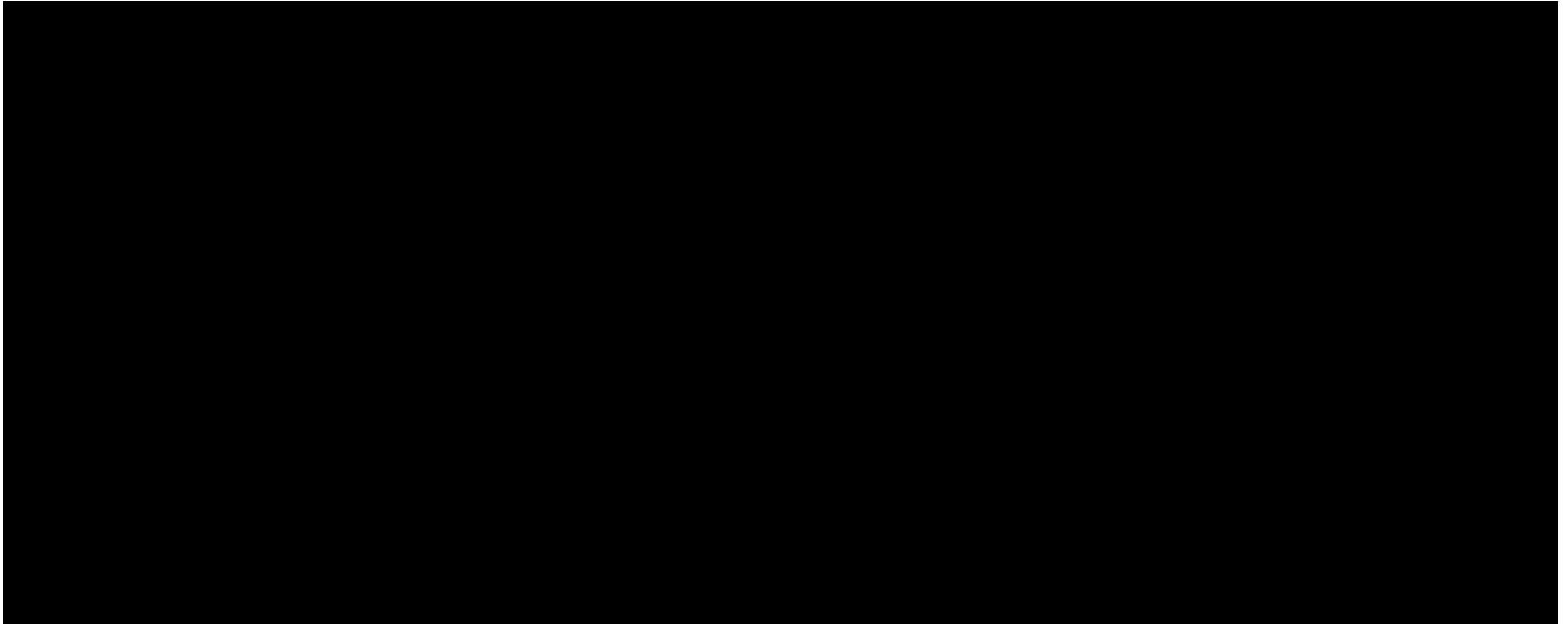


Table 4 Existing Thermal Resources: Operating Characteristics Cont.

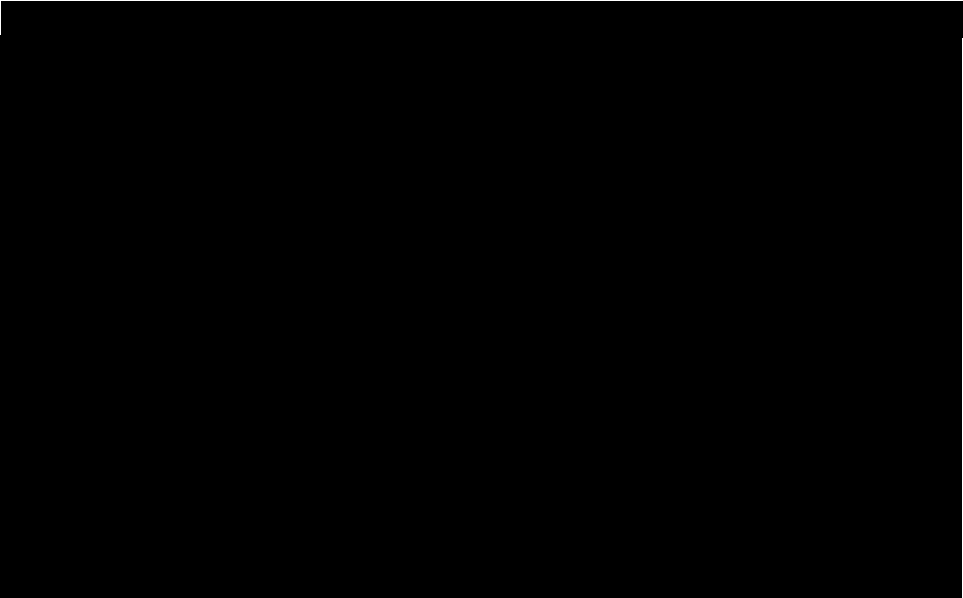


Table 5 Existing Thermal Resources: FO&M

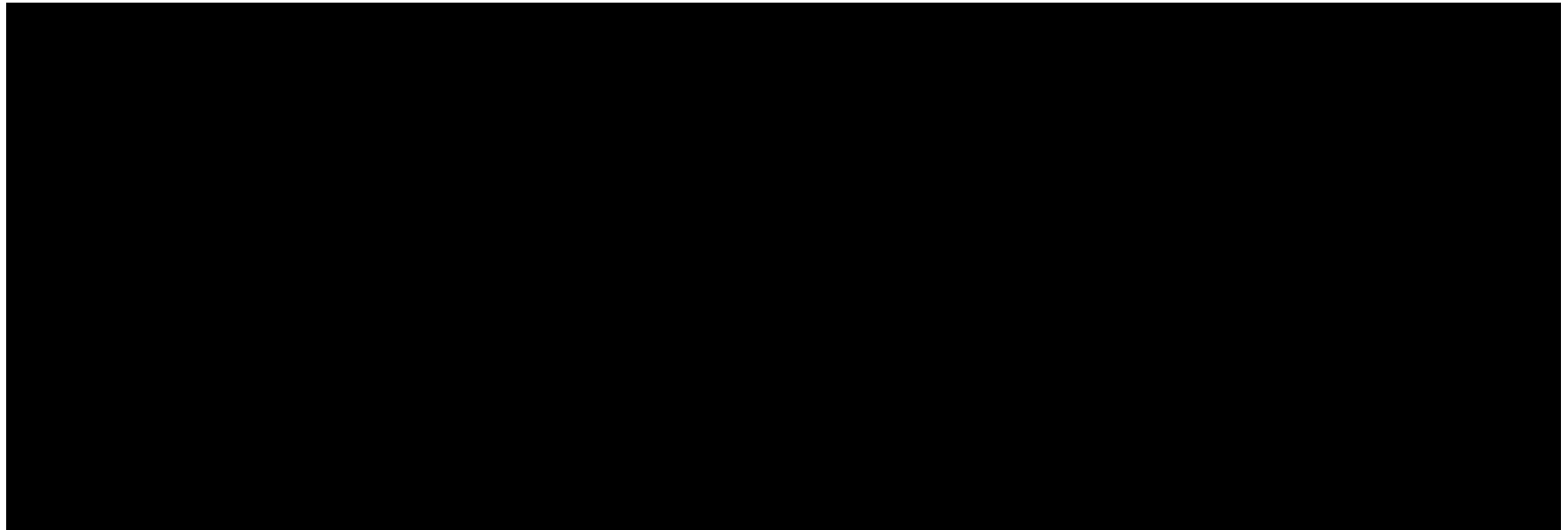


Table 6 Existing Thermal Resources: VO&M

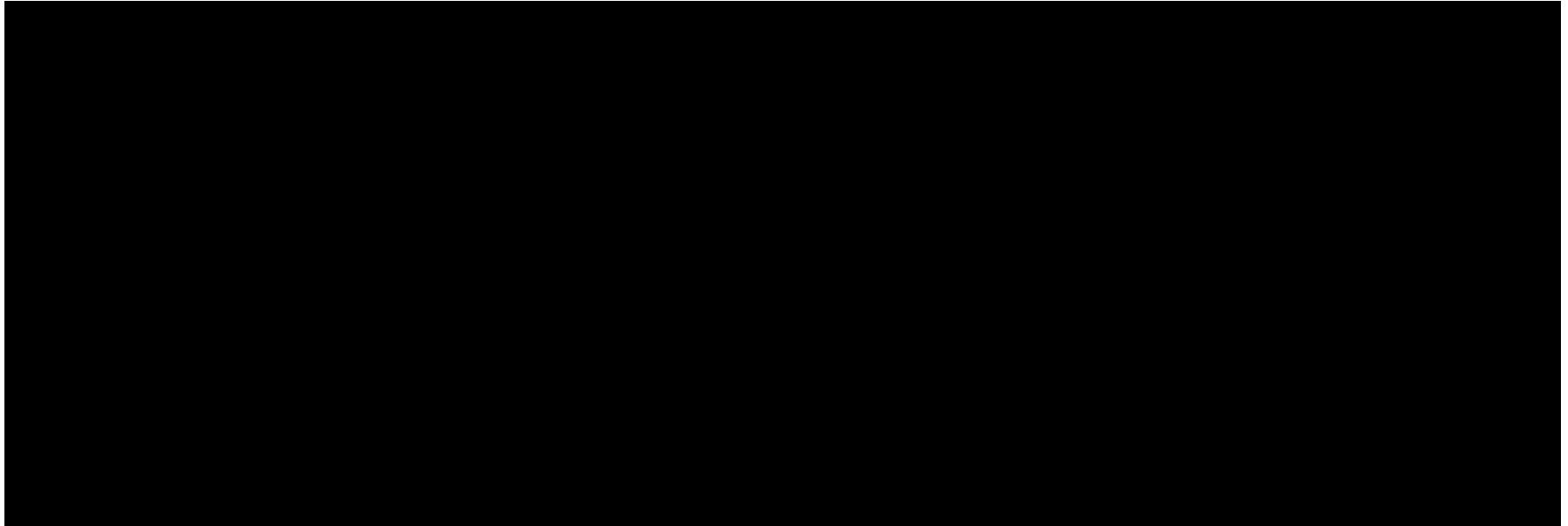


Table 7 Renewable Operating Characteristics

[REDACTED]

Table 8 Renewable Operating Characteristics cont.

[illegible]

Table 9 Existing Capacity Contracts WAPA Monthly

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Table 10 Existing Capacity Contracts

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Table 11 Existing Capacity Contracts Variable O&M

[illegible]

Table 12 Existing Capacity Contracts Variable O&M cont.

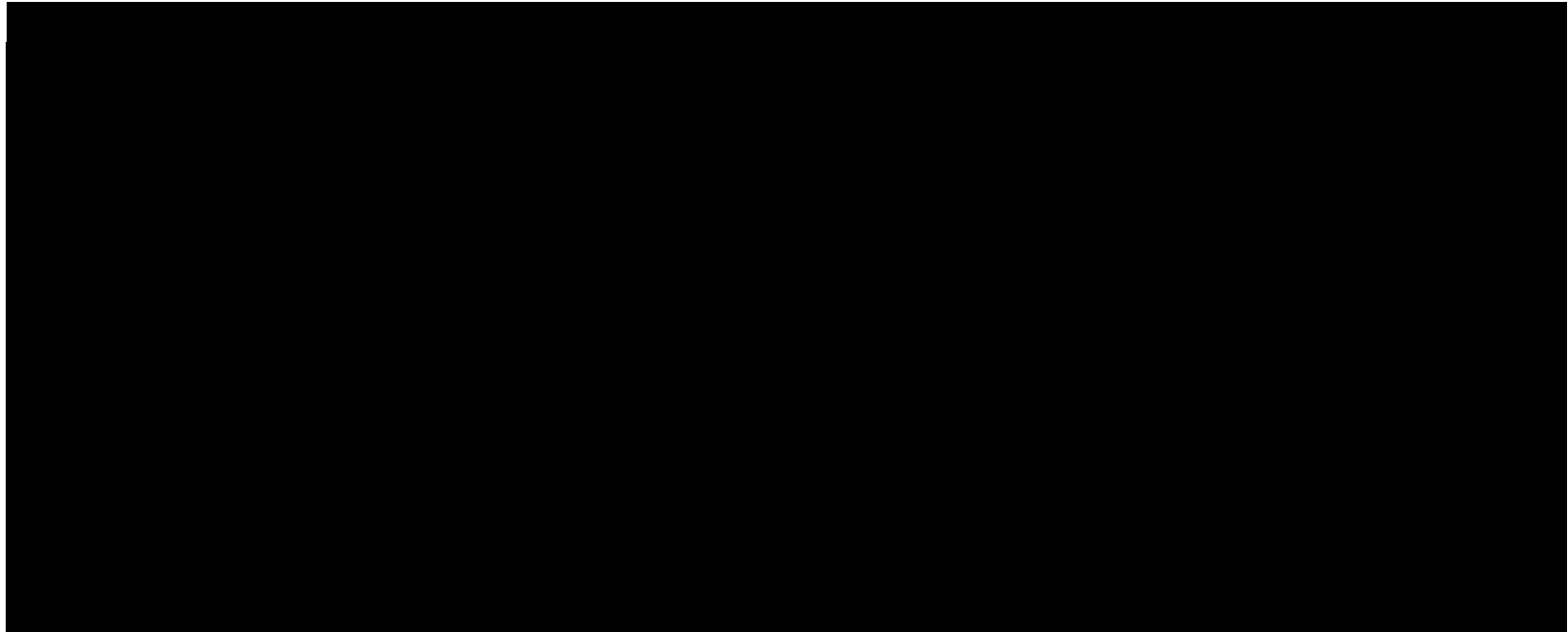


Table 13 Existing Capacity Contracts Fixed O&M

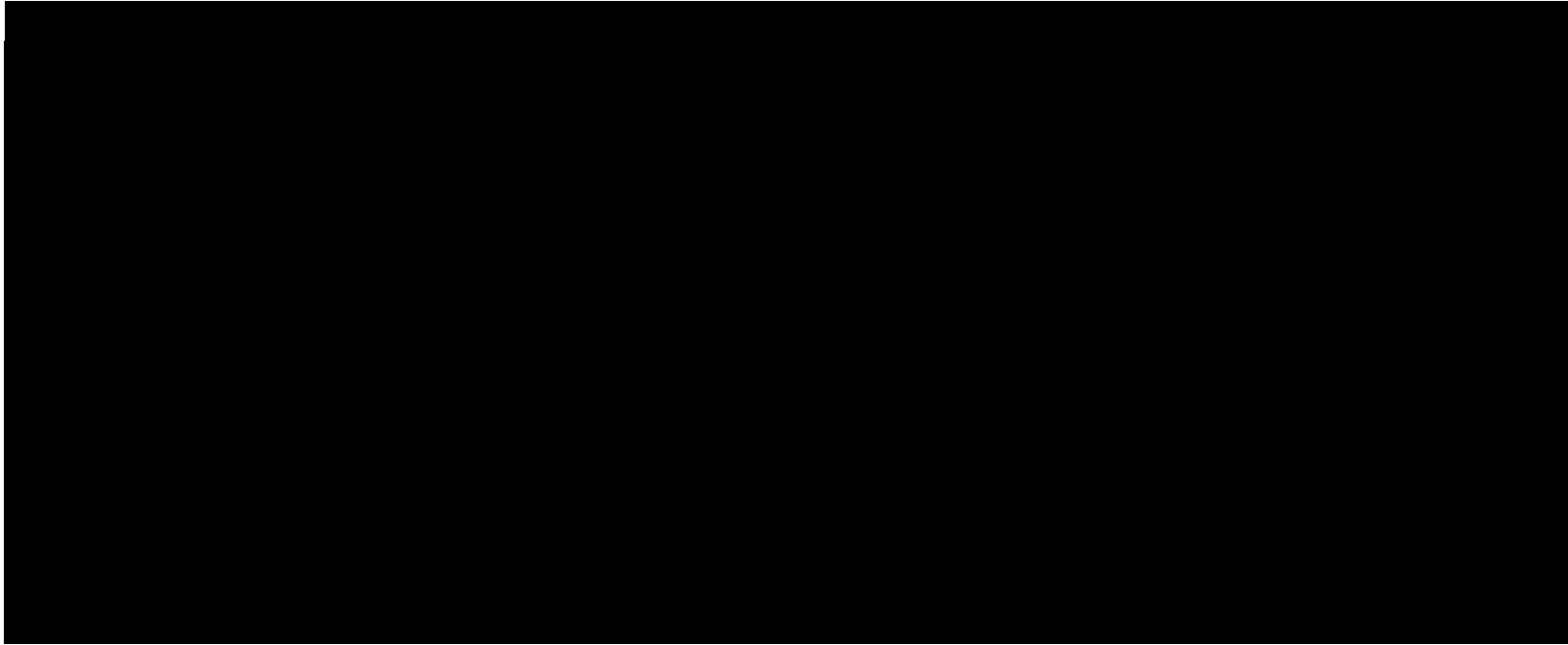
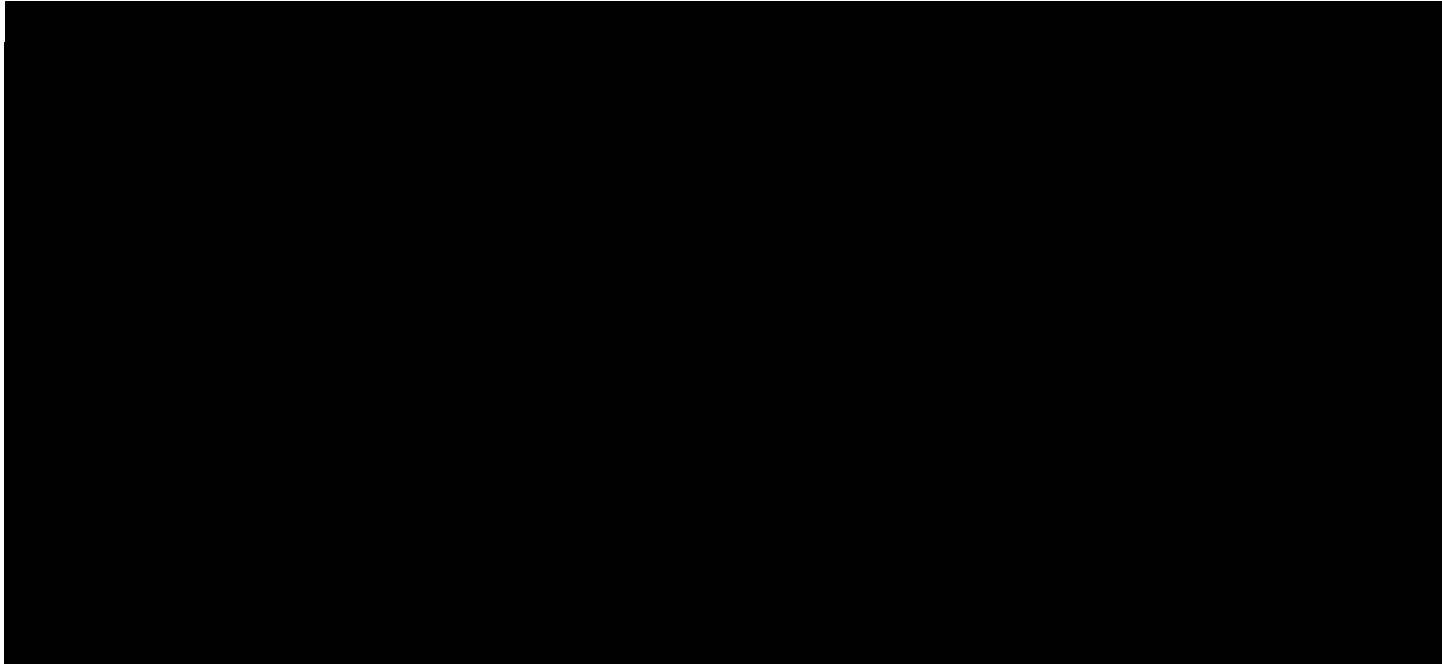


Table 14 Existing Capacity Contracts Fixed O&M cont.



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