

Table UP-3: U.P. Futures High Level Summary, Western/Central/Eastern U.P. Zones

MISO Future	Load Growth Outside ATC	Western U.P. Future	Scalable Load Growth	Point Load Changes	Generation Additions	Generation Retirements	Existing Generation	Wind Gen. Additions	Rogers City Generation	Western U.P. System Summary
Reference	Upper	Robust Economy	Upper	Upper	None	None	Upper	+25 MW	Upper	Large increase in western U.P. import
Environmental	Mid	High Retirements	Mid	Mid	None	None	Lower	+25 MW	Upper	Large increase in western U.P. import
Environmental	Mid-Lower	High Environmental	Mid-Lower	Mid-Lower	None	None	Mid-Lower	+50 MW	Lower	Modest generation/load balance issues
Reference	Lower	Slow Growth	Lower	Lower	None	None	Mid	+100 MW	Lower	Modest generation/load balance issues
20% Wind	Mid-Upper	DOE 20% Wind	Mid-Upper	Mid-Upper	None	None	Lower	+100 MW	Mid	Large increase in western U.P. import
Investment Limitation	Mid-Lower	Fuel & Inv. Limitations	Mid	Mid-Lower	None	None	Mid	None	Lower	Modest generation/load balance issues

MISO Future	Load Growth Outside ATC	Central U.P. Future	Scalable Load Growth	Point Load Changes	Generation Additions	Generation Retirements	Existing Generation	Wind Gen. Additions	Rogers City Generation	Central U.P. System Summary
Reference	Upper	Robust Economy	Upper	Upper	+60/110 MW	-116 MW	Upper	+50 MW	Upper	Large load increase, net generation reductions, Sawyer bio-mass
Environmental	Mid	High Retirements	Mid	Mid	None	-138 MW	Lower	+50 MW	Upper	Maximum Escanaba area import
Environmental	Mid-Lower	High Environmental	Mid-Lower	Mid-Lower	None	-116 MW	Mid-Lower	+100 MW	Lower	High Escanaba area import
Reference	Lower	Slow Growth	Lower	Lower	+10 MW	-116 MW	Mid	+200 MW	Lower	Modest generation/load balance issues
20% Wind	Mid-Upper	DOE 20% Wind	Mid-Upper	Mid-Upper	None	-138 MW	Lower	+200 MW	Mid	Maximum Escanaba area import
Investment Limitation	Mid-Lower	Fuel & Inv. Limitations	Mid	Mid-Lower	+10 MW	-116 MW	Mid	None	Lower	Modest generation/load balance issues

MISO Future	Load Growth Outside ATC	Eastern U.P. Future	Scalable Load Growth	Point Load Changes	Generation Additions	Generation Retirements	Existing Generation	Wind Gen. Additions	Rogers City Generation	Eastern U.P. System Summary
Reference	Upper	Robust Economy	Upper	Upper	+101 MW	None	Mid	+50 MW	Upper	Large load & generation increase, LP Gen. = high E-W flows
Environmental	Mid	High Retirements	Mid	Mid	+29 MW	None	Mid-Upper	+50 MW	Upper	LP Gen. = high E-W flows
Environmental	Mid-Lower	High Environmental	Mid-Lower	Mid-Lower	+5 MW	None	Mid	+100 MW	Lower	Modest generation/load balance issues
Reference	Lower	Slow Growth	Lower	Lower	+5 MW	None	Upper	+200 MW	Lower	Modest generation/load balance issues
20% Wind	Mid-Upper	DOE 20% Wind	Mid-Upper	Mid-Upper	+93 MW	None	Mid	+200 MW	Mid	Modest generation/load balance issues
Investment Limitation	Mid-Lower	Fuel & Inv. Limitations	Mid	Mid-Lower	+5 MW	None	Lower	None	Lower	Hydro off-line = high import + load-serving issues