

## ELECTRIC EQUIPMENT REVIEWED PURSUANT TO ORDER U-15787

**Prior to purchase of any equipment, a project developer should consult with Detroit Edison regarding the potential feasibility for safe and reliable interconnection of the specific proposed project with Detroit Edison's system.**

Detroit Edison makes no representation that any particular piece of equipment listed below is free from design or manufacturing defects (or defects of any kind). Further, Detroit Edison neither endorses nor makes any warranty of any kind with regard to the equipment identified below.

### APPROVED INVERTERS (Updated 12/29/2009)

Generation Sources	Manufacture	Model	Model #	Rated Output (kW)	Datasheet	
Wind Systems	<a href="#">Cascade Engineering, Inc.</a>	Swift Wind	GCI 1500	1.00	<a href="#">Swift Wind GCI 1500</a>	
	<a href="#">Mariah Power</a>	Windspire		1.20	<a href="#">Windspire</a>	
	<a href="#">Southwest Windpower</a>	Skystream	3.7	2.40	<a href="#">Skystream</a>	
PV Systems	<a href="#">Enphase Micro-Inverters</a>	M175	24-XX-S01/2, 24V Modules	.175	<a href="#">M175-M200</a>	
		M190	24-XX-S01/2, 32V Modules	.200	<a href="#">M190 Model</a>	
			72-208-S11/2	.190		
		M210	240-S11/2	.190		
			IG	2000	2.00	<a href="#">2000-3000-2500</a>
				3000	2.70	
				2500-LV	2.35	
				4000	4.00	<a href="#">4000-5100-4500</a>
				5100	5.10	
	<a href="#">Fronius USA</a>		IG Plus	4500-LV	4.50	
				3.0-1	3.00	<a href="#">IG Plus</a>
				3.8-1	3.80	
5.0-1				5.00		
6.0-1				6.00		
7.5-1				7.50		
10.0-1				10.0		
11.4-1	11.4					
	11.4					
	12.0					
<a href="#">Kaco</a>	Blue Planet		1501xi	1.50	<a href="#">1501xi</a>	
			2901xi	3.10	<a href="#">2901xi</a>	
			3601xi	4.00	<a href="#">3601xi</a>	
<a href="#">Power-One</a>	PVI		5000	5.00	<a href="#">5000-6000</a>	
			6000	6.00		

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PV Systems	<a href="#">PV Powered</a>	PVP	1100 2000 2500 2800 3000 3500 4600 4800 5200	1.10 2.20 2.50 2.80 3.00 3.50 4.60 4.80 5.20	<a href="#">1100-5200</a>
	<a href="#">SMA Solar Technology</a>	Sunny Boy	3000US 4000US@208V 4000US@240V 5000US 6000US 7000US	3.00 3.50 4.00 5.00 6.00 7.00	<a href="#">3000-4000</a>  <a href="#">5000-6000-7000</a>
	<a href="#">Solectria</a>	PVI	1800 2500 3000@208V 3000@240V 4000@208V 4000@240V 5000@208V 5000@240V 5300@208V 5300@240V 13KW 15KW 60KW 82KW 95KW	1.8 2.5 2.70 2.90 3.40 3.90 4.30 4.90 4.60 5.30 13.2 15.0 60.0 83.0 95.0	<a href="#">1800-2500</a>  <a href="#">3000-4000-5000-5100</a>  <a href="#">13-15</a>  <a href="#">60-82-95</a>
	<a href="#">SunPower</a>	SPR	3000m 4000m@208V 4000m@240V 5000m 6000m 7000m	3.00 3.50 4.00 5.00 6.00 7.00	<a href="#">3000-4000m</a>  <a href="#">5-6-7000m</a>

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PV Systems	<a href="#">Xantrex</a>	GT	2.8@208V 2.8@240V 3.3N@208V 3.3N@240V 3.8@208V 3.8@240V 4.0N@208V 4.0N@240V 5.0@208V 5.0@240V	2.70 2.80 3.10 3.30 3.50 3.80 3.80 4.00 4.50 5.00	<a href="#">2.8-5.0</a>
		XW	6048-120/240V 4548-120/240V 4024-120/240	6.00 4.50 4.00	<a href="#">XW models</a>

## Detroit Edison Approved Relays

Manufacturer	Model	Undervoltage (27)	Reverse Power (32)	Neutral Overcurrent (51N)	Time Overcurrent with Voltage Restraint (51V)	Overvoltage (59)	Neutral Overvoltage (59N)	Timing (62)	Directional Overcurrent (67)	Over/Under Frequency (81O/U)	Transfer Trip
<i>Utility Grade</i>											
Basler	BE1-27	X									
	BE1-27/59	X				X					
	BE1-32R* (1Φ or 3 Φ)		X								
	BE1-32 O/U		X								
	BE1-59					X					
	BE1-81 O/U									X	
	BE1-IPS100	X	X	X	X	X	X	X	X	X	X
Beckwith	M-3520		X								
General Electric	CV-2	X									
	CV-4					X					
	IAC53			X							
	IAV51					X					
	IAV54	X									
	IJCV				X						
	PJV					X	X				
	SAM							X			
	MDS**										X
Schweitzer Engineering Laboratories	SEL-351A	X		X		X	X	X	X	X	
	SEL-351-7	X	X	X		X	X	X	X	X	
	SEL-751A	X	X	X		X	X	X		X	
	2505/2506										X
Westinghouse	CO-8			X							
	CVD	X									
	SV-1					X	X				
	TD-5							X			
RFL Industries	6710									X	
<i>Industrial Grade</i>											
Agastat	7000 Series							X			
Basler	BE3-GPR	X				X				X	
	BE4-32* (1 Φ)		X								

\*Requires separate time delay relay.

\*\*Requires a radio access study for the site, and an SEL 2505/2506 for use.

*Note:* The exact model or style of the above listed relays will be dependent upon the particular site-specific application, or DECo specification.