

**Minnesota Power - City of Duluth PowerGrants**

EMS Contact:	Gary Olson	218-831-6373
Duluth Contact	DyAnn Andybur	218-730-4433
Duluth Contact	Joe Miller	218-730-5430
Duluth Contact	Tari Rayala	218-730-4434
Duluth Contact	Earl Stewart	218-730-4421
Duluth Contact	Scott Olson	218-591-6655
Duluth Contact	Karla Culhane	218-730-5170
Duluth Contact	Eric Shaffer	218-730-5072

**2002 Projects**

Year		Project	Technology	Project Manager	Estimated Energy Savings	Rebate	Estimated Cost	Rebate Issued
2002	1	Bayfront Park	Lighting	Jerry Johnson	2,390	\$160		2002
2002	2	Fire Hall #6	Lighting	Jerry Johnson	6,550	\$410		2002
2002	3	Fire Hall #6	Air Conditioner	Jerry Johnson	1,989	\$398		2002
2002	4	Fire Hall #6	Economizer	Jerry Johnson	6,011	\$225		2002
2002	5	Aviation Incubator Facility	Lighting	Jerry Johnson	180,827	\$8,611		2002
2002	6	Aviation Incubator Facility	RTU's - 5 Ton Units	Jerry Johnson	6,154	\$1,231		2002
2002	7	Aviation Incubator Facility	RTU's - 6 Ton Units	Jerry Johnson	2,909	\$582		2002
2002	8	Aviation Incubator Facility	Economizer - 5 Ton Units	Jerry Johnson	20,769	\$779		2002
2002	9	Aviation Incubator Facility	Economizer - 6 Ton Units	Jerry Johnson	19,636	\$736		2002
2002	10	Aviation Incubator Facility	EMS	Jerry Johnson	92,134	\$3,455		2002
2002	11	Aviation Incubator Facility	Motors	Jerry Johnson	672	\$48		2002
<b>2002</b>		<b>Total</b>			<b>340,042</b>	<b>\$16,635</b>		

**2003 Projects**

Year		Project	Technology	Project Manager	Estimated Energy Savings	Rebate	Estimated Cost	Rebate Issued
2003	1	Public Works Building	Lighting	Dan Green	56,672	\$4,359		2003
2003	2	Public Works Building	Occupancy Sensors	Dan Green	22,734	\$568		2003
2003	3	Public Works Building	AC - 15 Ton	Dan Green	2,524	\$505		2003
2003	4	Public Works Building	AC - 13 Ton	Dan Green	2,476	\$495		2003
2003	5	Public Works Building	AC - 8 Ton	Dan Green	4,782	\$956		2003
2003	6	Public Works Building	Economizer - 15 Ton	Dan Green	8,738	\$328		2003
2003	7	Public Works Building	Economizer - 13 Ton	Dan Green	7,429	\$279		2003
2003	8	Public Works Building	Economizer - 8 Ton	Dan Green	8,276	\$310		2003
2003	9	Public Works Building	Heat Wheel - Cooling Savings	Dan Green	12,612	\$473		2003
2003	10	Public Works Building	CO Sensors - Reduced Fan Usage	Dan Green	89,580	\$3,359		2003
2003	11	Public Works Building	Motors	Dan Green	3,507	\$168		2003
2003	12	Public Works Building	Transformers	Dan Green	7,899	\$296		2003
<b>2003</b>		<b>Total</b>			<b>227,229</b>	<b>\$12,097</b>		

**2004 Projects**

Year		Project	Technology	Project Manager	Estimated Energy Savings	Rebate	Estimated Cost	Rebate Issued
2004	1	Traffic Lights	Lighting - LED	Sandy Sweeney	77,290	\$4,069		11/24/2004
2004	2	Parking Lots	Lighting - Q Lamps	Sandy Sweeney	200,564	\$6,721		11/24/2004
<b>2004</b>		<b>Total</b>			<b>277,854</b>	<b>\$10,790</b>		

**2005 - Projects**

Year	Number	Project	Technology	Project Manager	Estimated Energy Savings	Rebate	Estimated Cost	Rebate Issued
2005	1	Traffic Lighting	LED Lighting	Sandy Sweeney	284,725	\$13,168		10/4/2005
<b>2005</b>		<b>Total</b>			<b>284,725</b>	<b>\$13,168</b>		

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2006 - Projects									
Year	Number	Project	Technology	Project Manager	Estimated Energy Savings	Rebate	Estimated Cost	Rebate Issued	
2006	1	Outdoor Ice Rinks	Lighting	Dan Green	10,823	\$21,645	\$35,998	6/9/2006	
2006	2	Traffic Signs	Lighting	Sandy Sweeney	227,475	\$10,639	\$28,403	9/19/2006	
2006	3	Washington Center	Lighting	Sandy Sweeney	14,362	\$1,680	\$7,500	12/4/2006	
<b>2006</b>	<b>Total</b>				<b>252,660</b>	<b>\$33,964</b>	<b>\$71,901</b>		

2007 - Projects									
Year	Number	Project	Technology	Project Manager	Estimated Energy Savings	Rebate	Estimated Cost	Rebate Issued	
2007	1	City Center West	Lighting - Office	Terry Groshong	1,508	\$503	\$1,925	1/3/2007	
2007	2	City Center West	Lighting - Penthouse	Terry Groshong	440	\$88	\$350	1/3/2007	
2007	3	City Center West	AC - 12 Ton	Terry Groshong	7,295	\$973	\$1,800	1/3/2007	
2007	4	City Center West	AC - 6 Ton	Terry Groshong	2,090	\$279	\$1,000	1/3/2007	
2007	5	City Center West	AC - 1.25 Ton	Terry Groshong	1,125	\$113	\$250	1/3/2007	
2007	6	City Center West	Economizer - 12 Ton	Terry Groshong	4,768	\$167	\$900	1/3/2007	
2007	7	City Center West	Economizer - 6 Ton	Terry Groshong	2,903	\$102	\$500	1/3/2007	
2007	8	City Center West	EMS	Terry Groshong	2,759	\$97	\$788	1/3/2007	
2007	9	City Center West	Transformer	Terry Groshong	10,604	\$371	\$2,100	1/3/2007	
2007	10	Enger Tower	Lighting - LED	Joe Miller	3,416	\$468	\$5,000	12/5/2007	
<b>2007</b>	<b>Total</b>				<b>36,909</b>	<b>\$3,159</b>	<b>\$14,613</b>		

2008 - Projects									
Year	Number	Project	Technology	Project Manager	Estimated Energy Savings	Rebate	Estimated Cost	Rebate Issued	
2008	1	Woodland Com. Center	Lighting	Cliff Tanner	5,640	\$564	\$1,500	4/29/2008	
2008	2	Interstate Fishing Pier	Lighting	Cliff Tanner	1,110	\$83	\$450	4/29/2008	
2008	3	Garfield Building	Lighting	Cliff Tanner	36,658	\$4,700	\$12,936	4/29/2008	
<b>2008</b>	<b>Total</b>				<b>43,408</b>	<b>\$5,347</b>	<b>\$14,886</b>		

2009 - Projects									
Year	Number	Project	Technology	Project Manager	Estimated Energy Savings	Rebate	Estimated Cost	Rebate Issued	
2009	1	Gary New Duluth	Lighting	Earl Stewart	35,851	\$2,561	\$10,000	10/15/2009	TG
<b>2009</b>	<b>Total</b>				<b>35,851</b>	<b>\$2,561</b>	<b>\$10,000</b>		

2010 - Projects									
Year	Number	Project	Technology	Project Manager	Estimated Energy Savings	Rebate	Estimated Cost	Rebate Issued	
2010	1	Animal Shelter	Lighting	Earl Stewart	9,611	\$520	\$2,934	3/27/2010	
2010	2	Western Booster Pump Station	Premium Efficient Motor	Eric Shaffer	13,178	\$2,000	\$7,380	5/27/2010	
2010	3	Western Booster Pump Station	VFD	Eric Shaffer	278,427	\$9,745	\$60,000	5/27/2010	
2010	4	Western Booster Pump Station	Motor Reduction	Eric Shaffer	87,029	\$3,992	\$50,000	5/27/2010	
2010	5	Arlington Pump Station	Premium Efficient Motors	Eric Shaffer	29,306	\$3,770	\$17,066	6/7/2010	
2010	6	Arlington Pump Station	Variable Frequency Drives	Eric Shaffer	160,272	\$5,610	\$75,300	6/7/2010	
2010	7	Street Lighting	Lighting	Earl Stewart	5,289	\$369	\$2,390	6/14/2010	
2010	8	Garfield Building	Lighting	Scott Olson	4,450	\$165	\$800	6/17/2010	
2010	9	Garfield Building	Lighting Controls	Scott Olson	5,249	\$184	\$500	6/17/2010	
2010	10	Fire Hall #10	Air Conditioner	Terry Groshung	3,360	\$400	\$1,250	8/20/2010	
2010	11	City Hall - MIS	Virtual Servers	Karla Culhane	377,731	\$13,221	\$56,000	8/30/2010	
2010	12	Pump Station #6	NEMA Premium Motors	Eric Shaffer	31,404	\$2,888	\$15,000	9/9/2010	
2010	13	Fire Hall #1	Lighting	Terry Groshung	9,059	\$691	\$2,700	9/9/2010	
2010	14	Fire Hall #1	Lighting Controls	Terry Groshung	1,700	\$60	\$200	9/9/2010	
2010	15	Fire Hall #1	Air Conditioner	Terry Groshung	2,492	\$332	\$600	9/9/2010	
2010	16	Eastern Tool House	Lighting	Terry Groshung	5,840	\$876	\$2,500	10/4/2011	
2010	17	Central Hillside Comm. Center	Lighting	DyAnn Andybur	1,858	\$275	\$500	10/14/2010	
2010	18	Western Tool House	Lighting	DyAnn Andybur	2,310	\$228	\$1,315	10/20/2010	
2010	19	Facilities Management	Lighting	Terry Groshung	1,875	\$225	\$3,485	11/15/2010	
2010	20	Proctor Pump Station	Motor Improvement	Eric Shaffer	2,421	\$211	\$1,351	11/15/2010	
<b>2010</b>	<b>Total</b>				<b>1,032,861</b>	<b>\$45,760</b>	<b>\$301,271</b>		

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2011 - Projects										
Year	Number	Project	Technology	Project Manager	Est Energy Savings	Rebate	Estimated Cost	Estimated Cost Savings	Rebate Submitted	
2011	1	Highland Pumping Station	NEMA Premium Motors	Eric Shaffer	12,354	\$1,500.00	\$5,018.00	\$873.81		5/23/2011
2011	2	Fire Hall #1	Lighting	DyAnn Andybur	3,942	\$498.00	\$966.00	\$349.23		7/27/2011
2011	3	Fire Hall #4	Lighting	DyAnn Andybur	4,210	\$294.59	\$1,262.00	\$305.48		7/27/2011
2011	4	Fire Hall #5	Lighting	DyAnn Andybur	1,268	\$48.75	\$141.00	\$80.97		7/27/2011
2011	5	Fire Hall #7	Lighting	DyAnn Andybur	1,270	\$126.00	\$252.00	\$102.82		7/27/2011
2011	6	Central Hillside CC	Lighting	DyAnn Andybur	2,592	\$333.80	\$703.00	\$267.74		7/27/2011
2011	7	Bayfront Comfort Station	Lighting	DyAnn Andybur	522	\$40.80	\$83.00	\$42.04		7/27/2011
2011	8	Lester Park Golf Course	Lighting	DyAnn Andybur	3,788	\$175.16	\$511.00	\$301.99		7/27/2011
2011	9	Enger Park Golf Course	Lighting	DyAnn Andybur	1,076	\$6.00	\$90.00	\$76.94		7/27/2011
2011	10	Woodland CC	Lighting	DyAnn Andybur	1,392	\$137.00	\$420.00	\$142.70		7/27/2011
2011	11	Chester Bowl	Lighting	DyAnn Andybur	1,350	\$33.00	\$231.00	\$202.43		7/27/2011
2011	12	Lower Chester CC	Lighting	DyAnn Andybur	104	\$3.00	\$27.00	\$22.40		7/27/2011
2011	13	Irving CC	Lighting	DyAnn Andybur	1,125	\$92.00	\$259.00	\$131.21		7/27/2011
2011	14	Lincoln Park CC	Lighting	DyAnn Andybur	450	\$4.00	\$40.00	\$36.53		7/27/2011
2011	15	Longview Tennis Center	Lighting	DyAnn Andybur	28	\$6.00	\$30.00	\$20.80		8/2/2011
2011	16	Enger Park	Lighting	DyAnn Andybur	9	\$2.00	\$10.00	\$7.11		7/27/2011
2011	17	Portman CC	Lighting	DyAnn Andybur	861	\$188.10	\$309.00	\$104.33		7/27/2011
2011	18	Lafayette Square	Lighting	DyAnn Andybur	47	\$1.00	\$7.00	\$5.80		7/27/2011
2011	19	Parks Tool House	Lighting	DyAnn Andybur	1,388	\$12.00	\$138.00	\$125.66		8/2/2011
2011	20	West Duluth Tool House	Lighting	DyAnn Andybur	2,952	\$144.50	\$273.00	\$116.94		8/2/2011
2011	21	Wade Stadium	Lighting	DyAnn Andybur	36	\$11.50	\$21.00	\$9.08		8/2/2011
2011	22	City Center West	Lighting	DyAnn Andybur	4,320	\$610.00	\$1,079.00	\$445.88		8/2/2011
2011	23	Observation Hill CC	Lighting	DyAnn Andybur	1,286	\$301.20	\$1,356.00	\$198.33		8/2/2011
2011	24	City Hall	Lighting	DyAnn Andybur	290	\$348.30	\$846.00	\$56.22		8/2/2011
2011	25	Enger Tower	Lighting	DyAnn Andybur	6,785	\$1,788.92	\$4,380.00	\$577.88		8/2/2011
2011	26	Lake Superior Plaza	Lighting	Joe Miller	2,860	\$429.00	\$992.60	\$202.03		11/20/2011
2011	27	Tech Village Ramp	Lighting	Joe Miller	7,446	\$510.00	\$1,845.00	\$373.34		11/22/2011
2011	28	Sail Sculpture	Lighting	Joe Miller	6,760	\$1,014.00	\$1,690.00	\$477.53		11/28/2011
<b>2011</b>	<b>Total</b>				<b>70,511</b>	<b>\$8,658.62</b>	<b>\$22,979.60</b>	<b>\$5,657.22</b>		

Minnesota Power - City of Duluth PowerGrants										
2012 - Projects										
Year	Number	Project	Technology	Project Manager	Est Energy Savings	Rebate	Estimated Cost	Estimated Cost Savings	Rebate Submitted	
2012	1	Public Safety Bldg.	Lighting	Robin Roeser	65,104	\$3,255.20	\$20,000.00	\$4,251.29		1/17/2012
2012	2	Public Safety Bldg.	Lighting Controls	Robin Roeser	45,092	\$4,776.00	\$18,000.00	\$1,686.43		1/17/2012
2012	3	Public Safety Bldg.	NEMA Premium Motors	Robin Roeser	18,238	\$517.50	\$2,442.00	\$1,089.19		1/17/2012
2012	4	Public Safety Bldg.	Variable Frequency Drives	Robin Roeser	143,119	\$5,009.18	\$11,700.00	\$5,352.66		1/17/2012
2012	5	Public Safety Bldg.	Air Conditioning	Robin Roeser	27,785	\$1,080.03	\$15,600.00	\$1,079.85		1/17/2012
2012	6	Public Safety Bldg.	Energy Recovery Units	Robin Roeser	5,368	\$187.87	\$4,000.00	\$170.42		1/17/2012
2012	7	Public Safety Bldg.	VAV Boxes	Robin Roeser	11,485	\$401.98	\$2,150.00	\$364.65		1/17/2012
2012	8	Public Safety Bldg.	Energy Management System	Robin Roeser	20,535	\$718.72	\$10,150.00	\$989.53		1/17/2012
2012	9	Public Safety Bldg.	Appliances	Robin Roeser	426	\$125.00	\$200.00	\$22.60		2/22/2012
2012	10	Firehall #10	Lighting	DyAnn Andybur	611	\$282.40	\$1,020.00	\$131.71		3/1/2012
2012	11	Chester Bowl	Lighting	DyAnn Andybur	3,598	\$474.59	\$1,432.00	\$324.20		3/1/2012
2012	12	Lower Chester CC	Lighting	DyAnn Andybur	1,387	\$145.49	\$1,060.00	\$123.20		3/1/2012
2012	13	City of Duluth - City Center West	Lighting	DyAnn Andybur	3,513	\$520.20	\$2,464.00	\$369.32		3/1/2012
2012	14	City of Duluth - Enger Golf Club House	Lighting	DyAnn Andybur	4,273	\$228.40	\$1,380.00	\$307.03		3/1/2012
2012	15	City of Duluth - Enger Golf Club House	Lighting Controls	DyAnn Andybur	675	\$24.00	\$300.00	\$35.82		3/1/2012
2012	16	City of Duluth - Lafayette Square	Lighting	DyAnn Andybur	831	\$292.00	\$740.00	\$146.78		3/1/2012
2012	17	City of Duluth - Parks Toolhouse	Lighting	DyAnn Andybur	5,126	\$512.60	\$3,900.00	\$452.22		3/1/2012
2012	18	City of Duluth - Parks Toolhouse	Lighting Controls	DyAnn Andybur	1,700	\$60.00	\$200.00	\$90.20		3/1/2012
2012	19	City of Duluth - Goodfellowship CC	Lighting	DyAnn Andybur	4,574	\$415.80	\$3,370.28	\$388.88		3/14/2012
2012	20	City of Duluth - Goodfellowship CC	Lighting Controls	DyAnn Andybur	450	\$15.75	\$200.00	\$23.88		3/14/2012
2012	21	City of Duluth - Park Point Beach House	Lighting	DyAnn Andybur	1,292	\$63.55	\$540.00	\$85.97		3/13/2012
2012	22	City of Duluth - Duluth Heights CC	Lighting	DyAnn Andybur	3,650	\$353.20	\$990.00	\$317.83		3/14/2012
2012	23	City of Duluth - Facilities Management Bldg.	Lighting	DyAnn Andybur	7,235	\$381.35	\$5,923.00	\$497.79		3/15/2012
2012	24	City of Duluth - Facilities Management Bldg.	Lighting	DyAnn Andybur	1,700	\$60.00	\$200.00	\$90.20		3/15/2012
2012	25	City of Duluth - Medical District Parking Ramp	Lighting	DyAnn Andybur	2,917	\$199.80	\$1,980.00	\$178.20		3/15/2012
2012	26	City of Duluth - Tech Village Parking Ramp	Lighting	DyAnn Andybur	2,646	\$181.20	\$1,256.00	\$161.61		3/15/2012
2012	27	City of Duluth - Washington Center	Lighting	DyAnn Andybur	7,481	\$487.75	\$4,070.00	\$457.00		3/16/2012
2012	28	City of Duluth - Washington Center	Lighting Controls	DyAnn Andybur	1,700	\$60.00	\$175.00	\$90.20		3/16/2012
2012	29	City of Duluth - Lakeview Chalet	Lighting	DyAnn Andybur	6,725	\$252.31	\$1,647.00	\$446.90		3/19/2012
2012	30	City of Duluth - Firehall #6	Lighting	DyAnn Andybur	2,773	\$142.41	\$363.00	\$194.31		3/19/2012
2012	31	City of Duluth - Lester Park Golf Club	Lighting	DyAnn Andybur	5,699	\$271.00	\$2,263.88	\$397.69		3/19/2012
2012	32	City of Duluth - Lester Park Golf Club	Lighting Controls	DyAnn Andybur	1,700	\$60.00	\$175.00	\$90.20		3/19/2012
2012	33	City of Duluth - Woodland CC	Lighting	DyAnn Andybur	218	\$38.40	\$240.00	\$25.05		3/19/2012
2012	34	City of Duluth - Central Hillside CC	Lighting	DyAnn Andybur	4,096	\$16.00	\$304.00	\$289.34		3/20/2012
2012	35	City of Duluth - City Hall	Lighting	DyAnn Andybur	2,844	\$142.20	\$1,050.00	\$200.90		3/20/2012
2012	36									
2012	37									
2012	38									
2012	39									
2012	40									
2012	41									
<b>2012</b>	<b>Total</b>				<b>416,566</b>	<b>\$21,751.88</b>	<b>\$121,485.16</b>	<b>\$20,923.05</b>		

City of Duluth - Powergrant Rebates - 2002 to present						
Year	Total	Estimated Energy Savings	Rebate	Estimated Costs	Estimated Cost Savings	
2002	Total	340,042	\$16,635			
2003	Total	227,229	\$12,097			
2004	Total	277,854	\$10,790			
2005	Total	284,725	\$13,168			
2006	Total	252,660	\$33,964	\$71,901		
2007	Total	36,909	\$3,159	\$14,613		
2008	Total	43,408	\$5,347	\$14,886		
2009	Total	35,851	\$2,561	\$10,000		
2010	Total	1,032,861	\$45,760	\$301,271		
2011	Total	70,511	\$8,659	\$22,980	\$5,657.22	
2012	Total	416,566	\$21,752	\$121,485	\$20,923.05	
<b>Total to Date</b>		<b>3,018,617</b>	<b>\$173,892</b>	<b>\$557,135</b>	<b>\$26,580</b>	