

## TURBINE INLET COOLING ASSOCIATION (TICA)

### Partial Database of Turbine Inlet Cooling (TIC) Installations

Updated: September 8, 2016

Please send corrections or additions to:

J.S. Andrepont  
The Cool Solutions Company  
CoolSolutionsCo@aol.com

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Initial Year of TIC Operation	Turbine Installation Data								Hot Weather Power Enhancement from TIC [1]		TIC System Developer, Designer, Equipment Supplier(s), or Installer	
	CT Plant Owner / Operator	CT Plant Location	Simple or Combined Cycle (SC or CC)	TIC Applied to Existing or New CTs	Quantity of CTs	CT Make	CT Model	CT Plant I.S.O. Output (MW)	TIC Power Increase (MW)	TIC Power Increase (%)	TICA Member with Primary Involvement	Other TICA Member(s) Contributing Products or Services to the Project
2018	Dominion Greensville County	Virginia, USA	CC	New	3	MHI	501J	1,354.0	168.0	12.0%	Turbine Air Systems	CB&I
2017	Gulf SPP GTS2	Thailand	CC	New	2	Siemens	SGT-800B	120.5	17.6		Turbine Air Systems	
2017	Gulf SPP GTS1	Thailand	CC	New	2	Siemens	SGT-800B	120.5	17.6		Turbine Air Systems	
2017	Gulf SPP GVTP	Thailand	CC	New	2	Siemens	SGT-800B	120.5	17.6		Turbine Air Systems	
2017	HF Lee CC	North Carolina, USA	CC	New	2	Siemens	SGT6-5000F	746.0	81.0		Turbine Air Systems	
2017	GREC 3	Oklahoma, USA	CC	New	1	MHI	501J	452.0	60.0		Turbine Air Systems	
2016	Malacas	Peru	SC	New	1	Siemens	SGT-800	46.0	4.5		Turbine Air Systems	
2016	Dominion Brunswick County	Virginia, USA	CC	New	3	MHI	501GAC	1,329.0	107.5	8.8%	Turbine Air Systems	CB&I
2015	Batangas	Philippines	SC	New	2	LM 6000 PC-S					Turbine Air Systems	
2015	Baytown	Texas, USA	CC	Existing	3	W501FD					Turbine Air Systems	
2015	G LNG Train 2	Australia	SC	New	6	LM 2500+G4					Turbine Air Systems	
2015	G LNG Train 1	Australia	SC	New	6	LM 2500+G4					Turbine Air Systems	
2015	AP LNG Train 2	Australia	SC	New	6	LM 2500+G4					Turbine Air Systems	
2015	AP LNG Train 1	Australia	SC	New	6	LM 2500+G4					Turbine Air Systems	
2015	QC LNG	Australia	SC	New	12	LM 2500+G4					Turbine Air Systems	
2014	Amata B. Grim 4 & 5	Thailand	CC	New	4	Siemens	SGT800	246.0	24.0		Turbine Air Systems	
2014	Ibese	Nigeria	SC	New	2	G.E.	LM 6000 PC-S	96.0	13.0		Turbine Air Systems	
2014	Obajana	Nigeria	SC	New	1	G.E.	LM 6000 PC-S	48.0	10.0		Turbine Air Systems	
2013	Bulo Bulo	Bolivia	SC	New	1	G.E.	LM 6000 PC	42.0	9.0		Turbine Air Systems	
2013	Sunshine Canyon	California, USA	SC	New	5	Solar	Mercury 50	23.0	4.0		Turbine Air Systems	
2013	Tihama	Saudi Arabia	SC	New	3	G.E.	7FA	544.0	41.0		Turbine Air Systems	
2013	Nesher Cement	Israel	CC	New	2	G.E.	LM 6000 PF	135.0	24.0		Turbine Air Systems	
2013	Golden Spread	Texas, USA	SC	Existing	1	G.E.	7FA	172.0	12.0		Turbine Air Systems	
2013	Dominion Warren County	Virginia, USA	CC	New	3	MHI	501GAC	1,329.0	107.5	8.8%	Turbine Air Systems	DN Tanks
2012	Diamantina	Australia	CC	New	4	Siemens	SGT800	242.0	24.0		Turbine Air Systems	
2012	Solomon I	Australia	SC	New	2	G.E.	LM6000PF	85.0	24.0		Turbine Air Systems	
2012	SWES Ghana	Ghana	CC	New	4	Orenda	GT25000	100.0	19.0		Turbine Air Systems	
2012	Proctor and Gamble	Mehoopany, PA, USA	CC	New	1	Rolls Royce	Trent 60	51.0	14.0	27.5%	Stellar	
2012	Diamond Generating Corp.	Mariposa, CA, USA	CC	New	4	G.E.	LM 6000 PC-S	184.0	54.0	29.3%	Stellar	
2011	University of Texas	Austin, TX, USA	CC / CHP	New/Exist	2			32 + 45	4 + 5	14.0%	CB&I	Cool Solutions
2011	Talang Duku	Indonesia	SC	New	2	G.E.	TM 2500	62.0	5.0		Turbine Air Systems	
2011	Morichal	Venezuela	SC	New	2	G.E.	LM6000 PC-S	87.4	12.6	14.5%	Turbine Air Systems	
2011	La Raisa II	Venezuela	SC	New	2	G.E.	LM6000 PC-S	86.2	13.8	16.1%	Turbine Air Systems	
2011	Dan River	North Carolina, USA	CC	New	2	G.E.	7FA	620.0	53.0		Turbine Air Systems	
2011	Amata B. Grim	Thailand	CC	New	2	Siemens	SGT800A	123.0	12.0		Turbine Air Systems	
2011	SNC Lavalin	Peru	CC	New	2	G.E.	7241 FA	370.0	86.0	23.2%	Stellar	
2011	Petrobras	Brazil	CC	New	1	G.E.	LM 6000 PC-S	46.0	12.0	26.1%	Stellar	
2011	SG Petroleum	Kuwait City, Kuwait	SC	Existing	2	G.E.	LM 6000 PC	84.2	43.3	105.6%	Turbine Air Systems	
2010	TECO	Houston, TX, USA	SC / CHP	New	1			45.0			CB&I	Cool Solutions
2010	Songas	Tanzania	SC	Existing	3	G.E.	LM 6000 PC	102.9	15.5	12.7%	Turbine Air Systems	
2010	Black Hills Colorado IPP	Colorado, USA	CC	New	4	G.E.	LM 6000 PC-S	184.0	42.0	22.8%	Stellar	
2010	Black Hills / Colorado Electric	Colorado, USA	CC	New	2	G.E.	LMS 100 PA	196.0	36.0	18.4%	Stellar	
2010	Dominion Energy - Bear Garden	New Canton, VA, USA	CC	New	2	G.E.	PG 7241 FA	560.0	60.3	13.5%	Turbine Air Systems	DN Tanks
2010	City of Anaheim	Anaheim, CA, USA	SC	New	4	G.E.	LM 6000 PC-S	185.1	34.8	20.9%	Turbine Air Systems	

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Initial Year of TIC Operation	Turbine Installation Data								Hot Weather Power Enhancement from TIC [1]		TIC System Developer, Designer, Equipment Supplier(s), or Installer	
	CT Plant Owner / Operator	CT Plant Location	Simple or Combined Cycle (SC or CC)	TIC Applied to Existing or New CTs	Quantity of CTs	CT Make	CT Model	CT Plant I.S.O. Output (MW)	TIC Power Increase (MW)	TIC Power Increase (%)	TICA Member with Primary Involvement	Other TICA Member(s) Contributing Products or Services to the Project
2010	GenConn Middletown, LLC	Middletown, CT, USA	SC	New	4	G.E.	LM 6000 PC-S	185.1	29.9	17.9%	Turbine Air Systems	
2010	GenConn Devon, LLC	Milford, CT, USA	SC	New	4	G.E.	LM 6000 PC-S	185.1	30.2	18.1%	Turbine Air Systems	
2010	Coolidge Power	Arizona, USA	SC	New	12	G.E.	LM 6000	576.0	htg only		Turbine Air Systems	
2010	Enmax Green Power	Calgary, AB, Canada	SC	New	3	G.E.	LM 6000	144.0	htg only		Turbine Air Systems	
2010	Buck Station	North Carolina, USA	CC	New	2	G.E.	7FA	550.0	48.0		Turbine Air Systems	
2010	Austin Energy	Austin, TX, USA	SC	New	2	G.E.	LM 6000 PC-S	92.6	24.5	33.4%	Turbine Air Systems	
2010	Brazos Electric Coop - Johnson I	Cleburne, TX, USA	CC	Existing	1	Siemens	501 F	250.0	35.9	15.3%	Turbine Air Systems	DN Tanks
2009	Colorado Energy Management	Hobbs, NM, USA	CC	New	2	MHI	501 FD2	188.0	19.0	10.1%	Stellar	
2009	Brazos Electric Coop - Jack I & II	Jacksboro, TX, USA	CC	Exist+New	2 + 2	G.E.	PG 7241 FA	1,120.0	101.2	11.0%	Turbine Air Systems	DN Tanks
2009	Confidential	California, USA	SC	New	2	G.E.	LM 6000 PC-S	92.6	0.0	#DIV/0!	Turbine Air Systems	
2009	Mackinaw Power LLC	Southeast USA	CC	New	2	G.E.	PG 7241 FA	560.0	48.4	10.9%	Turbine Air Systems	
2009	Topaz - Barney Davis	Texas, USA	CC	New	2	G.E.	PG 7241 FA	500.0	51.4	11.5%	Turbine Air Systems	
2009	Topaz - Nueces Bay	Texas, USA	CC	New	2	G.E.	PG 7241 FA	500.0	51.4	11.5%	Turbine Air Systems	
2009	City Public Service	Elmendorf, TX, USA	SC	Existing	2	G.E.	7FA				Stellar	
2009	City Public Service	Elmendorf, TX, USA	SC	New	4	G.E.	LM6000				Stellar	
2009	Western Farmers Electric Cooperative	Anadarko, OK, USA	SC	New	3	G.E.	LM6000				Stellar	
2009	Southern Co.	USA	CC	Existing	2	G.E.	7FA				Munters	
2009	FP&L	USA	CC	Existing	6	G.E.	7FA				Munters	
2009	FP&L	USA	CC	Existing	3	G.E.	7FA	750.0			Munters	
2009	Dominion Energy - Fairless Hills Ph 2	Fairless Hills, PA, USA	CC	New	4	G.E.	PG 7241 FA	1,038.0	114.9	12.9%	Turbine Air Systems	CB&I, Cool Solutions
2009	BP Rodeo	Texas, USA	CC	New	1	Solar	Mercury 50	4.0	1.0		Turbine Air Systems	
2009	Tampa Electric	USA			5	PWPS	FT8				Munters	
2008	Arizona Public Service	Arizona, USA	SC	New	2	G.E.	LM 6000 PC-S	92.6	15.6	19.2%	Turbine Air Systems	
2008	ABA	Africa	SC	New	3	G.E.	LM 6000 PC-S	139.2	13.8	10.5%	Turbine Air Systems	
2008	Shumaik	Kuwait	SC	New	3	G.E.	LM 6000 PC-S	139.2	35.1	35.7%	Turbine Air Systems	
2008	Alghanim	Kuwait	SC	New	6	G.E.	LM 6000 PC-S	278.4	74.7	38.0%	Turbine Air Systems	
2008	Dominion Energy - Fairless Hills Ph 1	Fairless Hills, PA, USA	CC	New	2	G.E.	PG 7241 FA	519.0	57.5	12.9%	Turbine Air Systems	
2008	L'Energia Power Station	Massachusetts, USA	SC	New	1	Rolls Royce	Trent 60	50.0	10.5	22.9%	Turbine Air Systems	
2008	Niland / Imperial Irrigation District	California, USA	SC	New	2	G.E.	LM 6000 PD-S	92.8	27.1	37.2%	Turbine Air Systems	GEA
2008	Pacific Gas & Electric Company	California, USA	CC	New	2	G.E.	PG 7241 FA	528.0	61.0	14.1%	Turbine Air Systems	GEA
2008	Winchester Peakers	Texas, USA	SC	New	4	G.E.	LM 6000 PD-S	185.6	34.2	21.7%	Turbine Air Systems	GEA
2008	Uruguay UTE Plant	South America	SC	New	2	G.E.	LM 6000 PC-S	92.8	2.3	2.4%	Turbine Air Systems	
2008	Akmaya	Turkey		Existing	2	Kawasaki	GTC70A	14.0			Munters	
2008	Zorlu Energy	Turkey		Existing		ACC units					Munters	
2008	Mopak	Turkey		Existing	1	Solar	Taurus 60	5.0			Munters	
2008	Entek	Turkey		Existing	5	G.E.	LM6 & 2500	174.0			Munters	
2008	Aksa	Turkey		Existing	4	G.E.	LM6000	188.0			Munters	
2008	Ak Gida	Turkey		Existing	1	Solar	Taurus 70	7.0			Munters	
2008	Besler Gida	Turkey		Existing	3	Solar	Taurus 60	15.0			Munters	
2008	Bosen Energy	Turkey		Existing	2	G.E.	LM6000	84.0			Munters	
2008	Enterprise	USA		Existing	2	G.E.	Frame 5	50.0			Munters	
2008	Packerab/Ge Oil & Gas	Middle East		New	4		compres'r dr	40.0			Munters	
2008	Marib/Ge Oil & Gas	Middle East		New	1		compres'r dr	25.0			Munters	
2008	Neerabup	Australia		New	2		SGT5 2000E	370.0			Munters	
2008	Braemer	Australia		New	3		SGT5 2000E	555.0			Munters	
2008	Antalya	Turkey		New	2		SGT5 4000F	550.0			Munters	
2008	Drewsen	Germany		Existing	5	Solar	Taurus 70	5.0			Munters	
2008	Quatalum	Qatar		New	4	G.E.	Frame 9FA	1,020.0			Munters	
2008	Garri Power Plant	Sudan		Existing	8	G.E.	Frame 6	320.0			Munters	
2008	HECO	USA		New	1	Siemens	501D	136.0			Munters	
2008	Arsenal Hill	USA		New	2	Siemens	501F	373.0			Munters	

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2008	Braintree Electric	USA		New	2	Rolls Royce		72.0			Munters	
2008	San Juan Basin/ConocoPhillips	USA		Existing	1	Rolls Royce	Avon				Munters	
2008	Enterprise Products	USA		Existing	2	G.E.	Frame 5				Munters	



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2007	DCP Midstream/Pegasus	US		Existing	2	Solar		10.0			Munters	
2007	Evander Andrews	US		New	1	Siemens	501F	372.0			Munters	
2007	Caithness	US		New	1	Siemens	501F	372.0			Munters	
2007	Amylum Nisasta	Turkey		Existing	1	Solar	Titan	15.0			Munters	
2007	Hayat Temizlik	Turkey		Existing	2	Solar	Taurus 70	11.0			Munters	
2007	Pakmaya	Turkey		Existing	3	Solar	Taurus 60	15.0			Munters	
2007	Alstom (G&H) Munmorah	Australia		New	4	ABB	GT 13 E2	720.0			Munters	
2007	Alstom (R&M) Rio TKS	Brazil		New	2	ABB	GT 11 N2	228.0			Munters	
2007	Alstom (R&M) Al Zhou	Kuwait		New	5	ABB	GT 13 E2	900.0			Munters	
2007	Siemens (R&M) Jebel Ali M	UAE		New	6	Siemens	V 94.3A	1,650.0			Munters	
2007	Williams Energy	Turkey		Existing	2	Solar	Taurus 70	11.0			Munters	
2007	Williams Energy	Turkey		Existing	3	Solar	Taurus 60	15.0			Munters	
2007	Uranquinty	Australia	SC	New	4	Siemens	V94.2	640.0			Munters	
2007	Williams Energy	US		Existing	2	NG compres'r		10.0			Munters	
2007	Mesaieed GE	Qatar		New	6	G.E.	Frame 9FA	1,530.0			Munters	
2007	Southern California Energy	US		New	2	G.E.	LM 6000	86.0			Munters	
2007	Termozulia	Venezuela		New	2	Westinghouse	501F	372.0			Munters	
2007	Kimbassan	Turkey		Existing	1	Solar	Taurus	5.0			Munters	
2007	Halkali Kagit	Turkey		Existing	1	Solar	Taurus	5.0			Munters	
2007	Cyco Fos	France	CC	New	1	ABB	GT 26B	420.0			Munters	
2007	Tallawara	Australia	CC	New	1	ABB	GT 26B	400.0			Munters	
2007	confidential owner	US		Existing	2	Westinghouse	501F	372.0			Munters	
2007	Reliance Industries Limited	Patalganga, Mah., India	SC / CHP	Existing	2	G.E.	MS 6001B	76.3	0.0	#DIV/0!	Cool Solutions	Avalon Consulting, Pasteris
2007	Sharikat Kahraba Hadjret En-Nouss	Wilaya of Tipaza, Algeria	CC	New	3	G.E.	9FB	1,227.0	160.0	#DIV/0!	Stellar	
2007	Inland Empire	California, USA	CC	New	2	G.E.	7H				Turbine Air Systems	
2006	Citizens Utilities Co	US		Existing	1	G.E.	LM2500	29.0			Munters	
2006	Pneumafil/Desert Basin	US		Existing	1	Siemens	501F	588.0			Munters	
2006	Pneumafil/Lakeside	US		Existing	2	Siemens	501F	373.0			Munters	
2006	Ege Seramik	Turkey		Existing	2	Solar	Centaur 50	8.0			Munters	
2006	Graniser	Turkey		Existing	1	Solar	Taurus 60	5.0			Munters	
2006	Termal Seramik	Turkey		Existing	1	Solar	Centaur 50	4.0			Munters	
2006	Altinyildiz	Turkey	CC	Existing	1	Solar	Taurus 60	5.0			Munters	
2006	Energetica Kladno	CZ		Existing	1	ABB	GT 8C	54.0			Munters	
2006	Stora Enso	Germany		Existing	1	G.E.	Frame 5	25.0			Munters	
2006	ENEL	Italy		New	2	Siemens	V94.3A	540.0			Munters	
2006	Siemens (R&M)	US		New	1	Siemens	5000 F	200.0			Munters	
2006	Siemens (R&M)	Middle East		New	3	Siemens	V94.3A	810.0			Munters	
2006	Siemens (R&M)	Middle East		New	4	Siemens	V94.3A	1,080.0			Munters	
2006	Kastamanou Entegre	Turkey		Existing	2	Solar	Taurus 60	10.0			Munters	
2006	Lenzing	Austria		Existing	2	Solar	Taurus 60	9.0			Munters	
2006	Goodyear	Turkey		Existing	2	Solar	Taurus 60	10.0			Munters	
2006	Alstom (G+H)	Australia		New	2	ABB	GT 26B	540.0			Munters	
2006	Siemens (G+H)	India		New	3	Siemens	V94.3A	840.0			Munters	
2006	Kappa Zulpich	Germany		Existing	3	Rolls Royce		14.0			Munters	
2006	Kartonsan	Turkey		Existing	4	Solar	Taurus 60	20.0			Munters	
2006	Hayat Kimya	Turkey		Existing	1	Solar	Taurus 60	5.0			Munters	
2006	Kastamanou Entegre	Turkey		Existing	1	Solar	Taurus 70	8.0			Munters	
2006	First Gas & Power	Phillipines		Existing	6	Siemens	V94.2A	936.0			Munters	
2006	Kwinana	Australia		New	1	ABB	GT 26	270.0			Munters	

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2005	Altair/GSEG	India		Existing	2	ABB	GT 8C	108.0			Munters	
2005	AAF/Unisource	USA		Existing	1	G.E.	LM2500	29.0			Munters	
2005	AAF/Iberese	USA		Existing	1	G.E.	LM2500	29.0			Munters	
2005	Pneumafil/Mankato	USA		Existing	1	Siemens	501F	187.0			Munters	
2005	Siemens (R&M)	Italy		New	2	Siemens	V94.3A	540.0			Munters	
2005	Alkim Kagit	Turkey		Existing	1	Solar	Taurus 60	5.0			Munters	
2005	Siemens (Kaefer)	Singapore		Existing	2	Siemens	V94.3A	540.0			Munters	
2005	ENEL	Italy		Existing	1	Siemens	V94.3A	270.0			Munters	
2005	Hayat Kagit	Turkey		Existing	1	Solar	Taurus 70	8.0			Munters	
2005	Desa	Turkey		Existing	2	Solar	Taurus 60	10.0			Munters	
2005	Ayka Tekstil	Turkey		Existing	1	Solar	Taurus 60	5.0			Munters	
2005	Tuma Turbomach	Pakistan		New	1	Solar	Taurus	5.0			Munters	
2005	Alstom (AAF)	Australia		New	3	ABB	13 E2	495.0			Munters	
2005	Tuma Turbomach	Switzerland		New	1	Solar	Taurus 60	5.0			Munters	
2005	Alstom (R&M)	Thailand		New	4	ABB	GT 26B	1,080.0			Munters	
2005	Man Turbo	Germany		Existing	2	FT8	Twinpack	96.0			Munters	
2005	Siemens (R&M)	Middle East		New	10	Siemens	V94.3A	1,600.0			Munters	
2005	Siemens (R&M)	Middle East		New	3	Siemens	V94.3A	780.0			Munters	
2005	ENEL	Italy		New	1	Siemens	V94.3A	260.0			Munters	
2005	Kings River Conservation District	Fresno, CA, USA	SC	New	2	G.E.	LM 6000	97.0	18.0	#DIV/0!	Stellar	
2005	Silicon Valley Power	San Jose, CA, USA	CC	New	2	G.E.	LM 6000	97.0	18.0	#DIV/0!	Stellar	
2005	Al Mussiab, Iraq	S. of Baghdad, Iraq	SC	New	10	G.E.	LM 6000	450.0				
2005	Austin Energy - Children's Hospital	Austin, TX, USA	SC / CHP	New	1	Solar	Mercury 50	4.3			Turbine Air Systems	CB&I, Cool Solutions
2005	confidential owner	Colombia	SC	New	2	G.E.	LM 6000	96.9	20.1	#DIV/0!	Turbine Air Systems	
2005	confidential owner	municipality, S.E. USA	SC	New	1	G.E.	LM 6000	42.6	14.5	#DIV/0!	Turbine Air Systems	GEA
2005	confidential owner	municipality, S.E. USA	SC	New	1	G.E.	LM 6000	42.6	14.5	#DIV/0!	Turbine Air Systems	GEA
2005	confidential owner	Nigeria	SC	New	3	G.E.	LM 6000	145.3	23.9	#DIV/0!	Turbine Air Systems	
2005	confidential owner	Riyadh, K. Saudi Arabia	SC	Existing	10	G.E.	7EA	750.0		30%	Stellar	Cool Solutions
2005	City of Lafayette	Lafayette, LA, USA	SC	New	2	G.E.	LM 6000	96.9	14.7	#DIV/0!	Turbine Air Systems	
2005	Modesto Irrigation District	Ripon, CA, USA	SC	New	2	G.E.	LM 6000	96.9	16.1	#DIV/0!	Turbine Air Systems	
2005	Princeton University	Princeton, NJ, USA	SC / CHP	Existing	1	G.E.	LM 1600	14.6			Cool Solutions	CB&I
2005	City of Riverside	Riverside, CA, USA	SC	New	2	G.E.	LM 6000	96.9	24.4	#DIV/0!	Turbine Air Systems	

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2004	Csepel Energia Kft	Hungary		Existing	2	G.E.	Frame 9E	266.0			Munters	
2004	Alstom (G+H)	India		New	2	ABB	13 E2	324.0			Munters	
2004	Akenerji	Turkey		Existing	6	EGT	Typhoon	30.0			Munters	
2004	Camfil	Greece		New	1	ABB	GT 10	19.0			Munters	
2004	Zorlu Enerji	Turkey		Existing	3	G.E.	LM 6000	126.0			Munters	
2004	Dresden Papier	Germany		Existing	2	Solar	Taurus 60	9.0			Munters	
2004	ENEL	Italy		Existing	9	Siemens	V94.3A	2,340.0			Munters	
2004	Modern Enerji	Turkey		Existing	2	ABB	GT 10	40.0			Munters	
2004	Modern Enerji	Turkey		Existing	2	gen'r cooling					Munters	
2004	Modern Enerji	Turkey		Existing	2	Solar	Mars	20.0			Munters	
2004	EEE	Turkey		Existing	1	G.E.	Frame 6	40.0			Munters	
2004	Bilenerji	Turkey		Existing	1	Rolls Royce	RB211	24.0			Munters	
2004	Austin Energy - Domain	Austin, TX, USA	SC / CHP	New	1	Solar	Centaur 50	4.5			Turbine Air Systems	
2004	confidential owner	Colombia	SC	New	1	G.E.	LM 6000	48.4	10.0	#DIV/0!	Turbine Air Systems	
2004	GFS	Long Island, NY, USA	SC	New	1	G.E.	LM 6000	48.4	7.6	#DIV/0!	Turbine Air Systems	
2004	Irag MOE	Iraq	SC	New	4	G.E.	LM 6000	170.5	58.9	#DIV/0!	Turbine Air Systems	
2004	Irag MOE	Iraq	SC	New	1	G.E.	LM 6000	42.6	14.1	#DIV/0!	Turbine Air Systems	
2004	Lafarge Gypsum Division	Silver Grove, KY, USA	SC / CHP	New	1			5.0				
2004	National Institute of Health	Bethesda, MD, USA	CC	New	1	Alstom	GT 10	22.0	2.7	14%		
2004	Newcrest Mining - Telfer	Port Hedland, Australia	SC	New	2	G.E.	LM 6000	96.8	0.0	#DIV/0!	Turbine Air Systems	
2004	NRG - Meriden [5]	Meriden, CT, USA	CC	New	2	G.E.	PG7241FA	475.0	64.4	#DIV/0!	Turbine Air Systems	
2004	NRG - Pike County [5]	Summit, MS, USA	CC	New	4	G.E.	PG7241FA	1,126.0	127.6	#DIV/0!	Turbine Air Systems	
2004	City of San Antonio	Leon Creek, TX, USA	SC	New	4	G.E.	LM 6000	193.7	37.9	#DIV/0!	Turbine Air Systems	
2004	West Minnesota Municipal	Exira Station, IA, USA	SC	New	2	G.E.	LM 6000	96.9	13.8	#DIV/0!	Turbine Air Systems	
2003	GE/Escatron	Spain		New	4	G.E.	LM 6000	168.0			Munters	
2003	Zorlu Enerji	Turkey		New	1	G.E.	LM 6000	42.0			Munters	
2003	AAF/Fars Iran	Iran		New	2	G.E.	Frame 9E	246.0			Munters	
2003	Form/Akin Tekstil	Turkey		Existing	1	Solar	Taurus 60	5.0			Munters	
2003	Tuma Turbomach/ Pakistan	Pakistan		New	1	Solar	Taurus 60	5.0			Munters	
2003	AES Sylvarena	Sylvarena, MS, USA	SC	New	3	G.E.	LM 6000	145.2	27.0	#DIV/0!	Turbine Air Systems	
2003	BTU Energy - Bryan Energy Facility	Bryan, TX, USA	SC	New	1	G.E.	LM 6000	45.0			Stellar	
2003	NRG-- Calpine - Brazos Valley	Thompsons, TX, USA	CC	New	2	G.E.	PG7241FA	631.0	59.0	#DIV/0!	Turbine Air Systems	
2003	Calpine - Stony Brook	Stony Brook, NY, USA	SC	New	1	G.E.	LM 6000	48.4	9.0	#DIV/0!	Turbine Air Systems	
2003	DENA - Deming Energy Facility	Deming, NM, USA	CC	New	2	G.E.	7FA	340.0			Stellar	
2003	DENA - Fayette Energy Facility	Fayette, PA, USA	CC	New	2	G.E.	7FA	340.0			Stellar	
2003	DENA - Grays Harbor Energy Facility	Grays Harbor, WA, USA	CC	New	2	G.E.	7FA	340.0			Stellar	
2003	DENA - Hanging Rock Energy Facility	Hanging Rock, OH, USA	CC	New	4	G.E.	7FA	680.0			Stellar	
2003	DENA - Moapa Energy Facility	Apex, AZ, USA	CC	New	4	G.E.	7FA	680.0			Stellar	
2003	Glendale - Grayson	Glendale, CA, USA	SC	New	1	G.E.	LM 6000	48.4	9.0	#DIV/0!	Turbine Air Systems	



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2002	GE/Lawrence County	Canada		New	6	G.E.	LM 6000	288.0			Munters	
2002	VAW	USA		New	6	P&W	Twin Pack	150.0			Munters	
2002	AAF/Covert	USA-MI		New	3	MHI	501G	762.0			Munters	
2002	AAF/Tupelo	USA-MS		New	2	MHI	501G	508.0			Munters	
2002	Pneumafil/Santa Cruz	Brazil		New	2	SW	501F	372.0			Munters	
2002	Pneumafil/Tractabel II	USA		New	2	SW	501G	508.0			Munters	
2002	Pneumafil/Fisk Peakers	USA		New	3	SW	501F	558.0			Munters	
2002	Pneumafil/Tractabel	USA		New	2	SW	501G	508.0			Munters	
2002	Pneumafil/Allegheny	USA		New	2	SW	501F	372.0			Munters	
2002	Pneumafil/Norte Fluminense	USA		New	3	SW	501F	558.0			Munters	
2002	GE/Ompa Ponca			New	1	G.E.	LM 6000	45.0			Munters	
2002	Stadtwerke Erfurt			Existing	2	G.E.	LM2500	50.0			Munters	
2002	Swanbank			New	1	ABB	GT 26	270.0			Munters	
2002	Pacific Corp			New	3	G.E.	LM 6000	126.0			Munters	
2002	Zorlu Enerji			Existing	2	EGT	Tempest	15.0			Munters	
2002	Nuh Enerji			Existing	1	G.E.	LM 2500	27.0			Munters	
2002	Zorlu Enerji			Existing	1	G.E.	LM 2500	27.0			Munters	
2002	Zorlu Enerji			Existing	2	G.E.	LM 6000	84.0			Munters	
2002	Oglethorpe			New	2	Siemens	V84.2	340.0			Munters	
2002	Black Hills Power - Las Vegas Cogen	Las Vegas, NV, USA	CHP		4	G.E.	LM 6000	180.0			Stellar	
2002	Calpine - Bethpage	Bethpage, NY, USA	SC	New	1	G.E.	LM 6000	48.4	9.0	#DIV/0!	Turbine Air Systems	
2002	Calpine - Creed	Suisun City, CA, USA	SC	New	1	G.E.	LM 6000	48.4	9.0	#DIV/0!	Turbine Air Systems	
2002	Calpine - Feather River	Yuba City, CA, USA	SC	New	1	G.E.	LM 6000	48.4	9.0	#DIV/0!	Turbine Air Systems	
2002	Calpine - Gilroy	Gilroy, CA, USA	SC	New	3	G.E.	LM 6000	145.2	27.0	#DIV/0!	Turbine Air Systems	
2002	Calpine - Goose Haven	Suisun City, CA, USA	SC	New	1	G.E.	LM 6000	48.4	9.0	#DIV/0!	Turbine Air Systems	
2002	Calpine - King City	King City, CA, USA	SC	New	1	G.E.	LM 6000	48.4	9.0	#DIV/0!	Turbine Air Systems	
2002	Calpine - Lambie	Suisun City, CA, USA	SC	New	1	G.E.	LM 6000	48.4	9.0	#DIV/0!	Turbine Air Systems	
2002	Calpine C-Star - Los Esteros	San Jose, CA, USA	CC	New	4	G.E.	LM 6000	193.6	36.0	#DIV/0!	Turbine Air Systems	
2002	Calpine - River View	Antioch, CA, USA	SC	New	1	G.E.	LM 6000	48.4	9.0	#DIV/0!	Turbine Air Systems	
2002	Calpine - Wolfskill	Suisun City, CA, USA	SC	New	1	G.E.	LM 6000	48.4	9.0	#DIV/0!	Turbine Air Systems	
2002	Calpine - Yuba City	Yuba City, CA, USA	SC	New	1	G.E.	LM 6000	48.4	9.0	#DIV/0!	Turbine Air Systems	
2002	DENA - Arlington Valley Energy Facility	Arlington, AZ, USA	CC	New	2	G.E.	7FA	340.0			Stellar	
2002	DENA - Hot Spring Energy Facility	Hot Spring, AR, USA	CC	New	2	G.E.	7FA	340.0			Stellar	
2002	DENA - Murray Energy Facility	Dalton, GA, USA	CC	New	4	G.E.	7FA	680.0			Stellar	
2002	DENA - Washington Energy Facility	Columbus, OH, USA	CC	New	2	G.E.	7FA	340.0			Stellar	
2002	El Paso - Corona Cogen	Corona, CA, USA	SC / CHP	Existing	1	G.E.	LM 5000	33.8	12.0	#DIV/0!	Stellar	
2002	TECO - Dell Generating Station	Dell, AR, USA	CC	New	2	G.E.	7FA	340.0			Stellar	
2002	TECO - McAdams Generating Facility	McAdams, MS, USA	CC	New	2	G.E.	7FA	340.0			Stellar	

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2001	Massac - Mid West Energy	USA-IL		New	2	G.E.	Frame 6	78.0			Munters	
2001	McGuffey	USA		New	9	P&W	Twin Pack	225.0			Munters	
2001	VAW	USA		New	14	P&W	Twin Pack	350.0			Munters	
2001	Alliance Colton	USA		New	8	G.E.	10	88.0			Munters	
2001	Pneumafil	USA-LA		New	2	SW		0.0			Munters	
2001	Pneumafil	USA		New	3	SW	501F	558.0			Munters	
2001	Pneumafil/Sithe	USA		New	2	MHI	701F	540.0			Munters	
2001	Pneumafil/Calpine Hillabee	USA		New	2	SW	501G	508.0			Munters	
2001	Pneumafil/Naconagolez	USA		New	1	SW	501G	254.0			Munters	
2001	Pneumafil/FPL RISE	USA		New	2	SW	501F	372.0			Munters	
2001	Pneumafil/Araucaria	Brazil		New	2	SW	501F	372.0			Munters	
2001	Pneumafil/Equistar	USA		New	4	SW	501F	744.0			Munters	
2001	Camfil/Farr	USA		New	2	G.E.	Frame 6B	78.0			Munters	
2001	Camfil/Farr	USA		New	3	RB	211	84.0			Munters	
2001	International Paper	USA		New	1	G.E.	Frame 6	39.0			Munters	
2001	TriGen-Cynergy	USA		New	5	Rolls Royce		70.0			Munters	
2001	Universal Silencer	USA-FL		New	1	G.E.	Frame 5 LA	23.0			Munters	
2001	Universal Silencer	USA		New	4	G.E.	10	44.0			Munters	
2001	AAF/Greystone	USA-TN		New	3	MHI	501F	558.0			Munters	
2001	AAF/Campeche	Mexico		New	1	MHI	501F	186.0			Munters	
2001	AAF/Tuxpan	Mexico		New	4	MHI	501F	744.0			Munters	
2001	AAF/Wyandotte	USA-MI		New	2	MHI	501F	372.0			Munters	
2001	AAF/Granbury	USA-TX		New	2	MHI	501G	508.0			Munters	
2001	AAF/Altamira	Mexico		New	2	MHI	501G	372.0			Munters	
2001	Bioc	Irak		New	5	ABB	GT 11 N	550.0			Munters	
2001	Covap	Switzerland		New	1	Solar	Taurus	4.0			Munters	
2001	Holden	USA		New	3	Siemens	V84.2	510.0			Munters	
2001	Monterrey	Mexico		New	4	ABB	GT 24	2,720.0			Munters	
2001	Oglethorpe	USA		New	4	Siemens	V84.2	424.0			Munters	
2001	Senoko	Singapore		New	1	ABB	GT 26	260.0			Munters	
2001	Swanbank	Australia		New	1	Alstom	GT 26	250.0			Munters	
2001	Union Carbide	USA		Existing	2	MHI	501F	340.0			Munters	
2001	DENA/PPL Global-Griffith Energy Fac	Griffith, AZ, USA	CC	New	2	G.E.	7FA	340.0			Stellar	
2001	El Paso - Macae	Macaes, RJ, Brazil	SC	New	20	G.E.	LM 6000	968.0	180.0	#DIV/0!	Turbine Air Systems	
2001	Enron International - Electrobolt	Seropedica, RJ, Brazil	SC	New	6	G.E.	LM 6000	290.4	54.0	#DIV/0!	Turbine Air Systems	
2001	Enron International - Electrobolt	Seropedica, RJ, Brazil	SC	New	2	G.E.	LM 6000	96.8	18.0	#DIV/0!	Turbine Air Systems	
2001	Enron North America / Austin Energy	Austin, TX, USA	SC	New	4	G.E.	LM 6000	193.6	36.0	#DIV/0!	Turbine Air Systems	
2001	GE / Calpine - Westbrook Energy Fac	Westbrook, ME, USA	CC	New	2	G.E.	7FA	340.0			Stellar	
2001	Grays Ferry Cogeneration	Philadelphia, PA, USA	CC / CHP	Existing	1	Westinghouse	501	120.0	15.0	#DIV/0!	Cool Solutions [3]	
2001	Wildflower - Palm Springs	Palm Springs, CA, USA		New	1	G.E.	LM 6000	48.8	9.0	#DIV/0!		
2001	Wildflower - San Diego	San Diego, CA, USA	SC	New	2	G.E.	LM 6000	97.6	18.0	#DIV/0!		



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2000	AAF	USA		New	2	ABB	GT 24	340.0			Munters	
2000	City of Vero Beach	USA		Existing	1	G.E.	Frame 6	70.0			Munters	
2000	Dahlmann	India		New	1	G.E.	Frame 6F	70.0			Munters	
2000	Dynegy Midwest	USA		Existing	4	SW	251	196.0			Munters	
2000	Formosa Plastics	USA-LA		Existing	2	G.E.	Frame 6B	80.0			Munters	
2000	Hermosillo	Mexico		New	1	ABB	GT 24	170.0			Munters	
2000	La Paloma	USA		New	4	ABB	GT 24	680.0			Munters	
2000	McGuffey Systems	USA		New	40	P&W		1,000.0			Munters	
2000	Peoples Calumet	USA		New	2	ABB	GT 24	340.0			Munters	
2000	Pneumafil	USA		New	17	SW	501F	3,162.0			Munters	
2000	Pneumafil	Australia		New	2	ABB	1300	330.0			Munters	
2000	Pneumafil	USA-MA		New	4	MHI	701F	1,080.0			Munters	
2000	Smurfit	Spain		New	1	FT 8		25.0			Munters	
2000	Soyland Power	USA		Existing	2			56.0			Munters	
2000	Trigen-St. Louis Energy	USA		Existing	2	Solar	60	10.0			Munters	
2000	Wolff Walsrode	Germany		Existing	1	Sulzer	3 D	6.0			Munters	
2000	EMI / Calpine - Rumford Gen Stn	Rumford, ME, USA	CC	New	1	G.E.	7FA	170.0			Stellar	GEA
2000	EMI / Calpine - Tiverton Gen Stn	Tiverton, RI, USA	CC	New	1	G.E.	7FA	170.0			Stellar	GEA
2000	Jamaica Pub. Svc. Co. - Hunts Bay	Kingston, Jamaica	CC / CHP	Existing	1	John Brown	MS5001	25.5	2.4	10%	Munters	
2000	TECO CCPS	New Church, VA, USA	SC	New	7	G.E.	LM 6000	338.8	63.0	#DIV/0!	Turbine Air Systems	
1999	City of Lubhok	USA		Existing	1	G.E.	Frame 5	25.0			Munters	
1999	Hays	USA		New	4	ABB	GT 24	680.0			Munters	
1999	Holsten Brauerei	Germany		Existing	1	Solar	Taurus	5.0			Munters	
1999	Hunt Oil	USA		Existing	2	G.E.	Frame 5	56.0			Munters	
1999	Hunt Oil	Jemen		Existing	2	G.E.	Frame 5	56.0			Munters	
1999	Jamaica Public Utility	Jamaica		Existing	1	G.E.	Frame 5	25.0			Munters	
1999	Kali und Salz	Germany		Existing	1	Solar	Taurus	5.0			Munters	
1999	L&G E	USA		New	2	ABB	GT 24	340.0			Munters	
1999	Lake Road	USA		New	3	ABB	GT 24	510.0			Munters	
1999	MAN	Germany			1	Solar	Taurus	5.0			Munters	
1999	McGuffey	USA		New	8	P&W		200.0			Munters	
1999	OHIO_PP	USA		New	2	ABB	GT 24	340.0			Munters	
1999	PPC Greece	Greece		Existing	1	TG	20	35.0			Munters	
1999	PPC Greece	Greece		Existing	1	G.E.	Frame 5	25.0			Munters	
1999	PPC Greece	Greece		Existing	2	ABB	GT 8B	108.0			Munters	
1999	Rütgers VFT	Germany		Existing	1	G.E.	Frame 8	10.0			Munters	
1999	South Texas Electricity Group	USA		Existing	1	G.E.	Frame 5	1.0			Munters	
1999	Stone Europa Carton	Germany		Existing	1	Sulzer	3 D	6.0			Munters	
1999	unknown	USA		New	4	ABB	GT 24	680.0			Munters	
1999	Wintershall Lingen	Germany		Existing	2	G.E.	LM 2500	50.0			Munters	
1999	AES - Cartagena	Cartagena, Colombia	SC	Existing	2	G.E.	LM 5000	67.6	0.0	#DIV/0!	Turbine Air Systems	
1999	Baylor University	Waco, TX, USA	SC / CHP	Existing	1			3.0				
1999	Calpine - Clear Lake	Pasadena, TX, USA	CC / CHP	Existing	3	Westinghouse	501 D5	412.0	49.0	#DIV/0!	Turbine Air Systems	Avalon Consulting, CB&I
1999	Illinova -El Paso Energy	Danville, IL, USA	SC	New	4	G.E.	LM 6000	168.4	70.4	#DIV/0!	Turbine Air Systems	

## TURBINE INLET COOLING ASSOCIATION (TICA)

### Partial Database of Turbine Inlet Cooling (TIC) Installations

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 CoolSolutionsCo@aol.com

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Initial Year of TIC Operation	Turbine Installation Data								Hot Weather Power Enhancement from TIC [1]		TIC System Developer, Designer, Equipment Supplier(s), or Installer	
	CT Plant Owner / Operator	CT Plant Location	Simple or Combined Cycle (SC or CC)	TIC Applied to Existing or New CTs	Quantity of CTs	CT Make	CT Model	CT Plant I.S.O. Output (MW)	TIC Power Increase (MW)	TIC Power Increase (%)	TICA Member with Primary Involvement	Other TICA Member(s) Contributing Products or Services to the Project
1998	Delbag	France		Existing	2	G.E.	LM 6000	86.0			Munters	
1998	Enron	Brazil		New	2	Siemens	V84.3A	340.0			Munters	
1998	Hawaii Power and Electric	USA		Existing	2	ABB	11N	160.0			Munters	
1998	Hunt Oil	Jemen		Existing	2	G.E.	Frame 5	56.0			Munters	
1998	Leche Pascaul	Spain		Existing	2	Centrax	507 KB	10.0			Munters	
1998	Norske Skog	Austria		Existing	1	G.E.	Frame 6	40.0			Munters	
1998	Schoeller	Germany		Existing	1	Solar	Taurus	4.4			Munters	
1998	Southern Power	USA		Existing	8	ABB	11N	672.0			Munters	
1998	Climaespaco	Lisbon, Portugal	SC / CHP	New	1			4.8	0.8	17%	Cool Solutions [3]	
1998	ENEL Electrica Las Brisas	Managua, Nicaragua	SC	New	1	G.E.	LM 6000	42.1	17.6	#DIV/0!	Turbine Air Systems [2]	
1998	Grays Ferry Cogeneration	Philadelphia, PA, USA	CC / CHP	New	1	Westinghouse	501	120.0	3.5	#DIV/0!		
1998	Kalaeloa Cogeneration Plant	Kapolei, HI, USA	CC / CHP	Existing	2	ABB	Type 11N	149.2	5.0	4%	Munters	
1998	PAWA - Channel Island	Darwin, NT, Australia	SC	Existing	3	G.E.	Frame 6	120.0	20.0	21%	Baltimore Aircoil Co.	
1998	Qaseem	Riyadh, K. Saudi Arabia	SC	New	6	G.E.	Frame 7EA	430.0	120.0	#DIV/0!		
1998	Reedy Creek Energy Services	L. Buena Vista, FL, USA	CC / CHP	Existing	1	G.E.	LM 5000	32.0	8.0	#DIV/0!	CB&I	Cool Solutions [3]
1997	Colortex	Spain		Existing	1	Solar	Mars	10.0			Munters	
1997	Novartis AG	Switzerland		Existing	1	Sulzer	3D	6.0			Munters	
1997	Papierfabrik Varel	Germany		Existing	1	Solar	Taurus	4.6			Munters	
1997	Papierfabriks- u. Verlags AG	Austria		Existing	1	G.E.	Frame 6	39.0			Munters	
1997	Smithfield	Australia		New	3	G.E.	Frame 6	117.0			Munters	
1997	BSES / Kerla	Cochin, India	SC	New	3	G.E.	LM 6000	126.3	52.8	#DIV/0!	Turbine Air Systems [2]	
1997	Eletronorte - Manaus	Manaus, Brazil	SC	New	2	G.E.	LM 6000	84.2	35.2	#DIV/0!	Turbine Air Systems [2]	
1997	Eletronorte - Porto Velho	Porto Velho, Brazil	SC	New	1	G.E.	LM 6000	42.1	17.6	#DIV/0!	Turbine Air Systems [2]	
1997	Lincoln Electric System	Lincoln, NE, USA	SC	Existing	2			152.5	28.0	#DIV/0!	CB&I	
1997	Tractebel Power, Inc.	Ripon, CA, USA	CHP	Existing	1	G.E.	LM 5000	52.0	8.0	#DIV/0!		
1997	Trigen Energy Corporation	Garden City, NY, USA	CC / CHP	Existing	1	G.E.	MS 6001B	42.0	8.0	#DIV/0!	Cool Solutions [3]	
1997	Trigen-Peoples District Energy	Chicago, IL, USA	SC / CHP	New	3	Turbomeca	Makila TI	3.3	0.9	#DIV/0!	CB&I	Cool Solutions [3]
1996	Bayer AG	Germany		Existing	1	AEG Kanis	IMS 5001	26.0			Munters	
1996	BHP	Australia		Existing	1	G.E.	Frame 6	39.0			Munters	
1996	Grace	Germany		Existing	1	Ruston	Tornado	5.8			Munters	
1996	GSP	Malaysia		Existing	3	ABB	GT 13 E2	492.0			Munters	
1996	GSP	Malaysia		Existing	2	G.E.	Frame 5	50.0			Munters	
1996	Offizine Lorenzia	Italy		Existing	1	Solar	Taurus	4.4			Munters	
1996	Wepa	Germany		Existing	1	Solar	Taurus	4.4			Munters	
1996	Power Barge / Cobee-Bolivia	La Paz, Bolivia	SC	New	2	G.E.	LM 6000	84.2	35.2	#DIV/0!	Turbine Air Systems [2]	
1996	Princeton U	Princeton, NJ, USA	SC / CHP	New	1	G.E.	LM 1600	14.6				
1996	Wuxi II	China	SC	New	1	G.E.	LM 6000	42.1	17.6	#DIV/0!	Turbine Air Systems [2]	
1996		Pleasant Hill, MO, USA	SC	Existing	1			71.7	6.0	#DIV/0!		

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	CT Plant Owner / Operator	CT Plant Location	Simple or Combined Cycle (SC or CC)	TIC Applied to Existing or New CTs	Quantity of CTs	CT Make	CT Model	CT Plant I.S.O. Output (MW)	TIC Power Increase (MW)	TIC Power Increase (%)	TICA Member with Primary Involvement	Other TICA Member(s) Contributing Products or Services to the Project
1995	Boroil Gas	Australia		Existing	1	unknown		4.5			Munters	
1995	Foret	Spain		Existing	1	EGT	8	6.3			Munters	
1995	Parkson Power	Australia		Existing	3	G.E.	Frame 6	117.0			Munters	
1995	Electroquil II	Guayaquil, Ecuador	SC	New	4	G.E.	LM 6000	168.4	70.4	#DIV/0!	Turbine Air Systems [2]	
1995	Emelec	Guayaquil, Ecuador	SC	New	1	G.E.	LM 6000	42.1	17.6	#DIV/0!	Turbine Air Systems [2]	
1995	Carolina P & L (Progress Energy)	Goldsboro, NC, USA	SC	Existing	1	Westinghouse	251			42%		
1995	Huntsman Chemical	Port Arthur, TX, USA	CC / CHP	Existing	2	G.E.	Frame 6B	76.6	11.8	#DIV/0!	Turbine Air Systems [2]	
1995	TECO - Alborado Power Plant	Escuentia, Guatemala	CC	New	2	G.E.	LM 6000	84.2	35.2	#DIV/0!	Turbine Air Systems [2]	
1995	Tenaga Nasional Berhad	Port Dickson, Malaysia	SC	New	6	G.E.	Frame 7EA			28%		
1995	Wuxi I / Endesa Chile	Conceptia, Chile	SC	New	2	G.E.	LM 6000	84.2	35.2	#DIV/0!	Turbine Air Systems [2]	
1995	Texaco Cogeneration Co.	San Ramon, CA, USA	SC / CHP		1			35.8	7.0	#DIV/0!		
1994	BASF	Spain		Existing	1	EGT	6	6.3			Munters	
1994	Bayer AG	Spain		Existing	1	EGT	6	6.3			Munters	
1994	Buchmann	Germany		Existing	1	Solar	Taurus	4.4			Munters	
1994	ENEL	Italy		Existing	1	Fiat	TG 50 C	90.0			Munters	
1994	Moritz J. Weig	Germany		Existing	1	Ruston	TB 5000	3.5			Munters	
1994	Saica	Spain		Existing	1	G.E.	Frame 6	38.0			Munters	
1994	Enron - Hainan Island Power Plant	Hainan Island, China	CC	New	3	G.E.	LM 6000	126.3	52.8	#DIV/0!	Turbine Air Systems [2]	
1994	Bechtel / Gilroy	Gilroy, CA, USA	CC	Existing	1	G.E.	Frame 7EA	83.5	0.0	#DIV/0!		
1994	Kamine - Carthage	Carthage, NY, USA	CC	New	1	G.E.	LM 6000	42.1	17.6	#DIV/0!	Turbine Air Systems [2]	
1994	KIAC Partners - JFK Int'l Airport	Jamaica, NY, USA	CC / CHP	New	2	G.E.	LM 6000	85.0				
1994	Oklahoma Municipal Power Authority	Tulsa, OK, USA	CC	New	1	G.E.	LM 6000	42.1	17.6	#DIV/0!	Turbine Air Systems [2]	
1993	Brauerei Felsenkeller	Germany		Existing	1	Solar	Saturn	1.1			Munters	
1993	Motor Oil	Greece		Existing	1	ABB	GT 35	16.8			Munters	
1993	Tivoli Werke	Germany		Existing	1	Solar	Saturn	1.1			Munters	
1993	Altresco	Pittsfield, MA, USA	CC	Existing	1	G.E.	Frame 6B	56.1	0.0	#DIV/0!		
1993	North American Chemical Co.	Trona, CA, USA	SC	Existing	1	G.E.	Frame 5	21.0	3.0	#DIV/0!		
1993	Trigen Energy Corporation	Oklahoma City, OK, USA	SC / CHP	New	1	Turbomeca	Makila TI	1.1	0.3	#DIV/0!		
1993	Trigen Energy Corporation	Tulsa, OK, USA	SC / CHP	New	1	Turbomeca	Makila TI	1.1	0.3	#DIV/0!		
1993	City of Fayetteville PWC	Fayetteville, NC, USA	SC & CC	Existing	8	G.E.	Frame 5	220.0	52.0	#DIV/0!		



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	CT Plant Owner / Operator	CT Plant Location	Simple or Combined Cycle (SC or CC)	TIC Applied to Existing or New CTs	Quantity of CTs	CT Make	CT Model	CT Plant I.S.O. Output (MW)	TIC Power Increase (MW)	TIC Power Increase (%)	TICA Member with Primary Involvement	Other TICA Member(s) Contributing Products or Services to the Project
1992	CSW - Mulberry Cogen	Bartow, FL, USA	CHP	New	1	G.E.	7EA	85.0			Stellar Turbine Air Systems [2]	
1992	El Paso (Destec) - Bear Mountain	Bakersfield, CA, USA	CC	New	1	G.E.	LM 5000	33.8	11.0	#DIV/0!		
1991	El Paso (Destec) - Live Oak	Bakersfield, CA, USA	CC	New	1	G.E.	LM 5000	33.8	11.0	#DIV/0!		
1991	El Paso (Destec) - McKittrick	McKittrick, CA, USA	CC	New	1	G.E.	LM 5000	33.8	11.0	#DIV/0!		
1991	Lincoln Electric System	Lincoln, NE, USA	SC	Existing	1	G.E.	Frame 7B	65.2	14.3	#DIV/0!		
1990	El Paso (Destec) - Badger Creek	Bakersfield, CA, USA	CC	New	1	G.E.	LM 5000	33.8	11.0	#DIV/0!		
1988	El Paso (Destec) - Chalk Cliff	Maricopa, CA, USA	CC	New	1	G.E.	LM 5000	33.8	11.0	#DIV/0!		
1988	Wheelabrator Norwalk Energy Co., Inc.	Norwalk, CA, USA	CC / CHP	New	1	G.E.	LM 2500	22.0	3.3	#DIV/0!		
1987	El Paso (Destec) - San Joaquin	Lathrop, CA, USA	CC	New	1	G.E.	LM 5000	33.8	11.0	#DIV/0!		
1975-79		Greenwood, MO, USA	SC	New	4			232.8	14.0	#DIV/0!		

**Footnotes:**

- [1] Values for Hot Weather Power Enhancement from TIC are relative to design ambient air temperature, not to I.S.O. conditions.
- [2] TIC project was originally executed under a different company name, prior to a business restructuring.
- [3] TIC project was originally executed while the firm's principal was at a different firm.
- [4] In some cases, only a portion of the installed refrigeration or storage capacity is used for TIC.
- [5] TIC equipment was fabricated and delivered; but power plant project was cancelled.



























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Initial Year of TIC Operation	Hot Weather CT Plant Power Enhancement from TIC					Evap. Cooling System Evap Media, Fog, or Wet Comp	Refrigeration System										Inlet Air Heating System Gas, Oil, Steam, or Electric
							Refrigeration Equipment [4]					Thermal Energy Storage (TES) System [4]					
	Non-TIC Power Output (MW)	Ambient Dry Bulb Air Temp (deg F)	Ambient Wet Bulb Air Temp (deg F)	Design TIC Inlet Air Temp (deg F)	TIC Power Output (MW)		Total TIC Cooling Coil Load (tons)	Inlet Coil Working Fluid	Absorp (A) and/or Mech (M) Chillers	Type of Heat Rejection	Chiller Working Fluid	Refrig'n System Capacity (tons)	TES Design Discharge (hrs/day)	Daily or Weekly TES Cycle	Chilled Water (CHW), Ice or Other	Thermal Storage Capacity (ton-hrs)	
1995																	
1995																	
1995																	
1995																	
1995																	
1995																	
1995																	
1995																	
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Initial Year of TIC Operation	Primary Source of Information
2018	CB&I / Cool Solutions
2017	Turbine Air Systems
2017	Turbine Air Systems
2017	Turbine Air Systems
2017	Turbine Air Systems
2017	Turbine Air Systems
2016	Turbine Air Systems
2016	CB&I / Cool Solutions
2015	Turbine Air Systems
2015	Turbine Air Systems
2015	Turbine Air Systems
2015	Turbine Air Systems
2015	Turbine Air Systems
2015	Turbine Air Systems
2015	Turbine Air Systems
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2014	Turbine Air Systems
2013	Turbine Air Systems
2013	Turbine Air Systems
2013	Turbine Air Systems
2013	Turbine Air Systems
2013	Turbine Air Systems
2013	DN Tanks / Cool Solutions
2012	Turbine Air Systems
2012	Turbine Air Systems
2012	Turbine Air Systems
2012	Stellar
2012	Stellar
2011	U of Texas / Cool Solutions
2011	Turbine Air Systems
2011	Turbine Air Systems
2011	Turbine Air Systems
2011	Turbine Air Systems
2011	Turbine Air Systems
2011	Stellar
2011	Stellar
2011	Turbine Air Systems
2010	TECO / Cool Solutions
2010	Turbine Air Systems
2010	Stellar
2010	Stellar
2010	DN Tanks / Cool Solutions
2010	Turbine Air Systems





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Initial Year of TIC Operation	Primary Source of Information
2008	Munters
2008	Munters
2008	Munters



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Initial Year of TIC Operation	Primary Source of Information
2005	Munters
2005	Munters
2005	Munters
2005	Munters
2005	Munters
2005	Munters
2005	Munters
2005	Munters
2005	Munters
2005	Munters
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2005	Munters
2005	Munters
2005	Munters
2005	Munters
2005	Stellar
2005	Stellar
2005	South-Port Systems
2005	Distributed Energy, Jul / Aug 2005
2005	Turbine Air Systems
2005	Turbine Air Systems
2005	Turbine Air Systems
2005	Turbine Air Systems
2005	Turbine Air Systems
2005	Stellar
2005	Turbine Air Systems
2005	Turbine Air Systems
2005	John Andrepont (Cool Solutions)
2005	Turbine Air Systems



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Initial Year of TIC Operation	Primary Source of Information
2004	Munters
2004	Munters
2004	Munters
2004	Munters
2004	Munters
2004	Munters
2004	Munters
2004	Munters
2004	Munters
2004	Munters
2004	Munters
2004	Munters
2004	Munters
2004	Distributed Energy, Jul / Aug 2005
2004	Turbine Air Systems
2004	Turbine Air Systems
2004	Turbine Air Systems
2004	Turbine Air Systems
2004	ASHRAE Journal, Aug 2005, pp 48-50
2004	Tom Tillman (TAS)
2004	Turbine Air Systems
2004	Turbine Air Systems
2004	Turbine Air Systems
2004	Turbine Air Systems
2004	Turbine Air Systems
2003	Munters
2003	Munters
2003	Munters
2003	Munters
2003	Munters
2003	Turbine Air Systems
2003	Stellar
2003	Turbine Air Systems
2003	Turbine Air Systems
2003	Stellar
2003	Stellar
2003	Stellar
2003	Stellar
2003	Stellar
2003	Turbine Air Systems









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Initial Year of TIC Operation	Primary Source of Information
1998	Munters
1998	Munters
1998	Munters
1998	Munters
1998	Munters
1998	Munters
1998	Munters
1998	Munters
1998	ASHRAE MN-00-16-2, 1/00
1998	South-Port Systems, Turbine Air Systems
1998	John Andrepont (Cool Solutions)
1998	Energy-Tech, Oct 2004 Supplement, pp 10-11
1998	Baltimore Aircoil, doc. SEN10M/3-99
1998	Chris Landry (TAS)
1998	IDEA Proceedings, 6/98
1997	Munters
1997	Munters
1997	Munters
1997	Munters
1997	Munters
1997	Turbine Air Systems
1997	Turbine Air Systems
1997	Turbine Air Systems
1997	Paul Mueller Co., TE-2034, 2000
1997	Kohlenberger / KACE Energy
1997	IDEA Proceedings, 6/00
1997	IDEA Proceedings, 6/00
1996	Munters
1996	Munters
1996	Munters
1996	Munters
1996	Munters
1996	Munters
1996	Munters
1996	Turbine Air Systems
1996	Tom Nyquist (Princeton U)
1996	Turbine Air Systems
1996	ASHRAE Design Guide: CTIAC

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1995	Munters
1995	Munters
1995	Munters
1995	Turbine Air Systems
1995	Turbine Air Systems
1995	Chris Landry (TAS)
1995	Turbine Air Systems
1995	Turbine Air Systems
1995	Chris Landry (TAS)
1995	Turbine Air Systems
	Paul Mueller Co., TE-2034, 2000
1994	Munters
1994	Munters
1994	Munters
1994	Munters
1994	Munters
1994	Munters
1994	Turbine Air Systems
1994	ASHRAE Dsgn Guide: ctiac, Power-Gen 94
1994	Turbine Air Systems
1994	IDEA Proceedings, 6/97
1994	Turbine Air Systems
1993	Munters
1993	Munters
1993	Munters
1993	Tom Tillman (TAS)
1993	Kohlenberger / KACE Energy
1993	IDEA Proceedings, 6/00
1993	IDEA Proceedings, 6/00
1993	ASHRAE Design Guide: CTIAC

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1992	Stellar
1992	Turbine Air Systems
1991	Turbine Air Systems
1991	Turbine Air Systems
1991	ASHRAE Dsgn Guide: ctia, EPRI Jrnl O/N 91
1990	Turbine Air Systems
1988	Turbine Air Systems
1988	Ray Pasteris (Pasteris Energy)
1987	Turbine Air Systems
1975-79	ASHRAE Design Guide: CTIAC