TURBINE INLET COOLING ASSOCIATION (TICA)

Partial Database of Turbine Inlet Cooling (TIC) Installations

Updated: March 20, 2024

Please send corrections or additions to:
J.S. Andrepont
The Cool Solutions Company
CoolSolutionsCo@aol.com

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	Turbine Installation Data								Hot Weather Power Enhancement from TIC [1]		TIC System Developer, Designer, Equipment Supplier(s), or Installer	
Initial Year of TIC Operation	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%		
2017	Duke Energy - Hines Energy Complex	Bartow, FL	CC	Existing	8	W, Smns & GE	F-Class	1,912.0	220.0	12.9%	Stellar Energy	Crom, Marlo Coil
2017	Gulf SPP GTS2	Thailand	CC	New	2	Siemens	SGT-800B	120.5	17.6			
2017	Gulf SPP GTS1	Thailand	CC	New	2	Siemens	SGT-800B	120.5	17.6			
2017	Gulf SPP GVTP	Thailand	CC	New	2	Siemens	SGT-800B	120.5	17.6			
2017	HF Lee CC	North Carolina, USA	CC	New	2	Siemens	SGT6-5000F	746.0	81.0			
2017	GREC 3	Oklahoma, USA	CC	New	1	MHI	501J	452.0	60.0			
2017	Jazan Units 6-10	Saudi Arabia			6	Siemens			htg only		Marlo Coil	
2016	Malacas	Peru	SC	New	1	Siemens	SGT 800	46.0	4.5		Marlo Coil	
2016	Dominion Brunswick County	Virginia, USA	CC	New	3	MHI	501 GAC	1,329.0	123.0	9.9%		
2015	Batangas	Philippines	SC	New	2	G.E.	LM 6000 PC-S	98.0	18.0			
2015	Baytown	Texas, USA	CC	Existing	3	Siemens	W501FD	834.0	78.0			
2015	G LNG Train 2	Australia	SC	New	6	G.E.	LM 2500+G4				Marlo Coil	
2015	G LNG Train 1	Australia	SC	New	6	G.E.	LM 2500+G4				Marlo Coil	
2015	AP LNG Train 2	Australia	SC	New	6	G.E.	LM 2500+G4				Marlo Coil	
2015	AP LNG Train 1	Australia	SC	New	6	G.E.	LM 2500+G4				Marlo Coil	
2015	QC LNG	Australia	SC	New	12	G.E.	LM 2500+G4				Marlo Coil	
2015	Footprint	Bridgewater, NJ, USA			1	Siemens			htg only		Marlo Coil	
2015	Jazan Units 1-4	Saudi Arabia			4	Siemens			htg only		Marlo Coil	
2014	Amata B. Grim 4 & 5	Thailand	CC	New	4	Siemens	SGT800	246.0	24.0			
2014	Ibese	Nigeria	SC	New	2	G.E.	LM 6000 PC-S	96.0	13.0			
2014	Obajana	Nigeria	SC	New	1	G.E.	LM 6000 PC-S	48.0	10.0			
2014	Merck	West Point, PA, USA			1	G.E.					Marlo Coil	
2014	Tashkent	Uzbekistan			1	G.E.					Marlo Coil	
2014	Hess	New York, USA			1	G.E.			htg only		Marlo Coil	
2014	Calpine	Texas, USA			2	G.E.			htg only		Marlo Coil	
2013	Bulo Bulo	Bolivia	SC	New	1	G.E.	LM 6000 PC	42.0	9.0			
2013	Sunshine Canyon	California, USA	SC	New	5	Solar	Mercury 50	23.0	4.0			
2013	Tihama	Saudi Arabia	SC	New	3	G.E.	7FA	544.0	41.0			
2013	Nesher Cement	Israel	CC	New	2	G.E.	LM 6000 PF	135.0	24.0			
2013	Golden Spread	Texas, USA	SC	Existing	1	G.E.	7FA	172.0	12.0			
2013	Dominion Warren County	Virginia, USA	CC	New	3	MHI	501 GAC	1,329.0	107.0	8.6%		
2013	Habas	Turkey			2	G.E.					Marlo Coil	
2012	Diamantina	Australia	CC	New	4	Siemens	SGT800	242.0	24.0		Marlo Coil	
2012	Solomon I	Australia	SC	New	2	G.E.	LM6000PF	85.0	24.0			
2012	SWES Ghana	Ghana	CC	New	4	Orenda	GT25000	100.0	19.0			
2012	Proctor and Gamble	Mehoopany, PA, USA	CC	New	1	Rolls Royce	Trent 60	51.0	14.0	27.5%	Stellar Energy	
2012	Diamond Generating Corp.	Mariposa, CA, USA	CC	New	4	G.E.	LM 6000 PC-S	184.0	54.0	29.3%	Stellar Energy	
2012	Qurayyah	Saudi Arabia			14	Siemens					Marlo Coil	
2012	Mittelsburen	Germany			1				htg only		Marlo Coil	
2012	Manzanillo	Mexico			6	G.E.					Marlo Coil	
2012	Fenix Power	Peru			1	Siemens					Marlo Coil	
2012	Nizhnevartousk	Russia			1	G.E.			htg only		Marlo Coil	
2011	University of Texas	Austin, TX, USA	CC / CHP	Existing	1	G.E.	LM2500+G4 DLE	32.0	6.0	24.5%	Cool Soluitons	
2011	Talang Duku	Indonesia	SC	New	2	G.E.	TM 2500	62.0	5.0			
2011	Morichal	Venezuela	SC	New	2	G.E.	LM6000 PC-S	87.4	12.6	14.5%		
2011	La Raisa II	Venezuela	SC	New	2	G.E.	LM6000 PC-S	86.2	13.8	16.1%		

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2011	Dan River	North Carolina, USA	CC	New	2	G.E.	7FA	620.0	53.0		Marlo Coil	
2011	Amata B. Grim	Thailand	CC	New	2	Siemens	SGT800A	123.0	12.0			
2011	SNC Lavalin	Peru	CC	New	2	G.E.	7241 FA	370.0	86.0	23.2%	Stellar Energy	
2011	Petrobras	Brazil	CC	New	1	G.E.	LM 6000 PC-S	46.0	12.0	26.1%	Stellar Energy	
2011	SG Petroleum	Kuwait City, Kuwait	SC	Existing	2	G.E.	LM 6000 PC	84.2	43.3	105.6%		
2011	K-Gen	Arkansas, USA			2	G.E.					Marlo Coil	
2010	TECO	Houston, TX, USA	SC / CHP	New	1	G.E.	LM 6000 PD-S	45.0	10.4	32.3%	Cool Soluitons	Marlo Coil
2010	Orange Grove Energy	Pala, CA, USA	SC	New	2	G.E.	LM 6000 PC-S	99.6	20.0	25.0%		
2010	Songas	Tanzania	SC	Existing	3	G.E.	LM 6000 PC	102.9	15.5	12.7%		
2010	Black Hills Colorado IPP	Colorado, USA	CC	New	4	G.E.	LM 6000 PC-S	184.0	42.0	22.8%	Stellar Energy	
2010	Black Hills / Colorado Electric	Colorado, USA	CC	New	2	G.E.	LMS 100 PA	196.0	36.0	18.4%	Stellar Energy	Marlo Coil
2010	Dominion Energy - Bear Garden	New Canton, VA, USA	CC	New	2	G.E.	PG 7241 FA	560.0	60.3	13.5%		
2010	City of Anaheim	Anaheim, CA, USA	SC	New	4	G.E.	LM 6000 PC-S	185.1	34.8	20.9%		
2010	GenConn Middletown, LLC	Middletown, CT, USA	SC	New	4	G.E.	LM 6000 PC-S	185.1	29.9	17.9%		
2010	GenConn Devon, LLC	Milford, CT, USA	SC	New	4	G.E.	LM 6000 PC-S	185.1	30.2	18.1%		
2010	Coolidge Power	Arizona, USA	SC	New	12	G.E.	LM 6000	576.0	htg only			
2010	Enmax Green Power	Calgary, AB, Canada	SC	New	3	G.E.	LM 6000	144.0	htg only		Marlo Coil	
2010	Duke Energy - Buck Station	North Carolina, USA	CC	New	2	G.E.	7FA	550.0	48.0		Marlo Coil	
2010	Austin Energy	Austin, TX, USA	SC	New	2	G.E.	LM 6000 PC-S	92.6	24.5	33.4%	Marlo Coil	
2010	Brazos Electricl Coop - Johnson I	Cleburne, TX, USA	CC	Existing	1	Siemens	501 F	250.0	35.9	15.3%		
2010	Sugurt	Russia			2	G.E.			htg only		Marlo Coil	
2009	Cornell University	Ithaca, NY, USA	CC	New	2	Solar	Titan 130	30.0	3.0	11.1%		
2009	Sempra	Escondido, CA, USA	CC	Existing	2	G.E.	7FA	565.6	50.0	12.0%		
2009	Colorado Energy Management	Hobbs, NM, USA	CC	New	2	MHI	501 FD2	188.0	19.0	10.1%	Stellar Energy	
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%		
2009	Confidential	California, USA	SC	New	2	G.E.	LM 6000 PC-S	92.6	36.0	58.6%		
2009	Mackinaw Power LLC	Georgia, USA	CC	New	2	G.E.	PG 7241 FA	560.0	48.4	10.9%	Marlo Coil	
2009	Topaz - Barney Davis	Texas, USA	CC	New	2	G.E.	PG 7241 FA	500.0	51.4	11.5%	Marlo Coil	
2009	Topaz - Nueces Bay	Texas, USA	CC	New	2	G.E.	PG 7241 FA	500.0	51.4	11.5%	Marlo Coil	
2009	City Public Service	Elmendorf, TX, USA	SC	Existing	2	G.E.	7FA				Stellar Energy	Marlo Coil
2009	City Public Service	Elmendorf, TX, USA	SC	New	4	G.E.	LM6000				Stellar Energy	Marlo Coil
2009	Western Farmers Electric Cooperative	Anadarko, OK, USA	SC	New	3	G.E.	LM6000				Stellar Energy	
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%	Cool Solutions	
2009	BP Rodeo	Texas, USA	CC	New	1	Solar	Mercury 50	4.0	1.0			
2009	Tampa Electric	USA			5	PWPS	FT8				Munters	
2009	JPS - Bogue Station	Jamaica									Marlo Coil	
2009	Sugres	Russia			1	G.E.			htg only		Marlo Coil	
2009	Oresundsverket	Sweden				G.E.			htg only		Marlo Coil	
2009	Exelon Power - Grande Prairie	Alberta, Canada			1						Marlo Coil	
2008	Saudi Electricty Company - PP9	Riyadh, K. Saudi Arabia	SC	Existing	40	G.E.	7EA	3,000.0	812.0	31%		
2008	Arizona Public Service	Arizona, USA	SC	New	2	G.E.	LM 6000 PC-S	92.6	15.6	19.2%		
2008	ABA	Africa	SC	New	3	G.E.	LM 6000 PC-S	139.2	13.8	10.5%		
2008	Shumaik	Kuwait	SC	New	3	G.E.	LM 6000 PC-S	139.2	35.1	35.7%		
2008	Alghanim	Kuwait	SC	New	6	G.E.	LM 6000 PC-S	278.4	74.7	38.0%		
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%		
2008	L'Energia Power Station	Massachusetts, USA	SC	New	1	Rolls Royce	Trent 60	50.0	10.5	22.9%		
2008	Niland / Imperial Irrigation District	California, USA	SC	New	2	G.E.	LM 6000 PD-S	92.8	27.1	37.2%	Marlo Coil	
2008	Pacific Gas & Electric Company	California, USA	CC	New	2	G.E.	PG 7241 FA	528.0	61.0	14.1%		
2008	Winchester Peakers	Texas, USA	SC	New	4	G.E.	LM 6000 PD-S	185.6	34.2	21.7%		

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2008	Uruguay UTE Plant	South America	SC	New	2	G.E.	LM 6000 PC-S	92.8	2.3	2.4%		
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	Marlo Coil
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	Siemens	SGT5 2000E	370.0			Munters	
2008	Braemer	Australia		New	3	Siemens	SGT5 2000E	555.0			Munters	
2008	Antalya	Turkey		New	2	Siemens	SGT5 4000F	550.0			Munters	
2008	Drewsen	Germany		Existing	5	Solar	Taurus 70	5.0			Munters	
2008	Quatalum	Quatar		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	
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 Zhour	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	4.7	7%	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	15%	Stellar Energy	Marlo Coil
2007	Inland Empire	California, USA	CC	New	2	G.E.	7H				Marlo Coil	
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 Zülpich	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	P&W	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	22%	Stellar Energy	
2005	Silicon Valley Power	San Jose, CA, USA	CC	New	2	G.E.	LM 6000	97.0	18.0	22%	Stellar Energy	
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			Cool Solutions	
2005	confidential owner	Colombia	SC	New	2	G.E.	LM 6000	96.9	20.1	26%		
2005	confidential owner	municipality, S.E. USA	SC	New	1	G.E.	LM 6000	42.6	14.5	49%		
2005	confidential owner	municipality, S.E. USA	SC	New	1	G.E.	LM 6000	42.6	14.5	49%		
2005	confidential owner	Nigeria	SC	New	3	G.E.	LM 6000	145.3	23.9	21%		
2005	Saudi Electricty Company - PP8	Riyadh, K. Saudi Arabia	SC	Existing	10	G.E.	7EA	750.0		30%	Stellar Energy	Cool Solutions
2005	City of Lafayette	Lafayette , LA, USA	SC	New	2	G.E.	LM 6000	96.9	14.7	18%		
2005	Modesto Irrigation District	Ripon, CA, USA	SC	New	2	G.E.	LM 6000	96.9	16.1	22%		
2005	Princeton University	Princeton, NJ, USA	SC / CHP	Existing	1	G.E.	LM 1600	14.6	2.5	20%	Cool Solutions	
2005	City of Riverside	Riverside, CA, USA	SC	New	2	G.E.	LM 6000	96.9	24.4	35%		

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2004	University of Cincinnati	Cincinnati, OH, USA	CC / CHP	New	2	Solar	Titan 130	47.0				
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				
2004	confidential owner	Colombia	SC	New	1	G.E.	LM 6000	48.4	10.0	26%		
2004	GFS	Long Island, NY, USA	SC	New	1	G.E.	LM 6000	48.4	7.6	19%		
2004	Irag MOE	Iraq	SC	New	4	G.E.	LM 6000	170.5	58.9	51%		
2004	Irag MOE	Iraq	SC	New	1	G.E.	LM 6000	42.6	14.1	49%		
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	22.2	29%		
2004	NRG - Meriden [5]	Meriden, CT, USA	CC	New	2	G.E.	PG7241FA	475.0	64.4	15%		
2004	NRG - Pike County [5]	Summit, MS, USA	CC	New	4	G.E.	PG7241FA	1,126.0	127.6	13%		
2004	City of San Antonio	Leon Creek, TX, USA	SC	New	4	G.E.	LM 6000	193.7	37.9	25%		
2004	West Minnesota Municipal	Exira Station, IA, USA	SC	New	2	G.E.	LM 6000	96.9	13.8	17%		
2003	Missouri River Energy	Brayton, IA, USA	SC	New	3	G.E.	LM 6000	126.0	30.0	29%		
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	22%		
2003	BTU Energy - Bryan Energy Facility	Bryan, TX, USA	SC	New	1	G.E.	LM 6000	45.0			Stellar Energy	
2003	Calpine - Brazos Valley	Thompsons, TX, USA	CC	New	2	G.E.	PG7241FA	631.0	59.0	10%		
2003	Calpine - Stony Brook	Stony Brook, NY, USA	SC	New	1	G.E.	LM 6000	48.4	9.0	22%		
2003	DENA - Deming Energy Facility	Deming, NM, USA	CC	New	2	G.E.	7FA	340.0			Stellar Energy	
2003	DENA - Fayette Energy Facility	Fayette, PA, USA	CC	New	2	G.E.	7FA	340.0			Stellar Energy	
2003	DENA - Grays Harbor Energy Facility	Grays Harbor, WA, USA	CC	New	2	G.E.	7FA	340.0			Stellar Energy	
2003	DENA - Hanging Rock Energy Facility	Hanging Rock, OH, USA	CC	New	4	G.E.	7FA	680.0			Stellar Energy	
2003	DENA - Moapa Energy Facility	Apex, AZ, USA	CC	New	4	G.E.	7FA	680.0			Stellar Energy	
2003	Glendale - Grayson	Glendale, CA, USA	SC	New	1	G.E.	LM 6000	48.4	9.0	22%		

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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 Energy	
2002	Calpine - Bethpage	Bethpage, NY, USA	SC	New	1	G.E.	LM 6000	48.4	9.0	22%		
2002	Calpine - Creed	Suisun City, CA, USA	SC	New	1	G.E.	LM 6000	48.4	9.0	22%		
2002	Calpine - Feather River	Yuba City, CA, USA	SC	New	1	G.E.	LM 6000	48.4	9.0	22%		
2002	Calpine - Gilroy	Gilroy, CA, USA	SC	New	3	G.E.	LM 6000	145.2	27.0	22%		
2002	Calpine - Goose Haven	Suisun City, CA, USA	SC	New	1	G.E.	LM 6000	48.4	9.0	22%		
2002	Calpine - King City	King City, CA, USA	SC	New	1	G.E.	LM 6000	48.4	9.0	22%		
2002	Calpine - Lambie	Suisun City, CA, USA	SC	New	1	G.E.	LM 6000	48.4	9.0	22%		
2002	Calpine C-Star - Los Esteros	San Jose, CA, USA	CC	New	4	G.E.	LM 6000	193.6	36.0	22%		
2002	Calpine - River View	Antioch, CA, USA	SC	New	1	G.E.	LM 6000	48.4	9.0	22%		
2002	Calpine - Wolfskill	Suisun City, CA, USA	SC	New	1	G.E.	LM 6000	48.4	9.0	22%		
2002	Calpine - Yuba City	Yuba City, CA, USA	SC	New	1	G.E.	LM 6000	48.4	9.0	22%		
2002	DENA - Arlington Valley Energy Facility	Arlington, AZ, USA	CC	New	2	G.E.	7FA	340.0			Stellar Energy	Marlo Coil
2002	DENA - Hot Spring Energy Facility	Hot Spring, AR, USA	CC	New	2	G.E.	7FA	340.0			Stellar Energy	Marlo Coil
2002	DENA - Murray Energy Facility	Dalton, GA, USA	CC	New	4	G.E.	7FA	680.0			Stellar Energy	Marlo Coil
2002	DENA - Washington Energy Facility	Columbus, OH, USA	CC	New	2	G.E.	7FA	340.0			Stellar Energy	Marlo Coil
2002	Duke Energy - Jasper	Hardeeville, SC, USA			3	G.E.					Marlo Coil	
2002	El Paso - Corona Cogen	Corona, CA, USA	SC / CHP	Existing	1	G.E.	LM 5000	33.8	12.0	48%	Stellar Energy	
2002	TECO - Dell Generating Station	Dell, AR, USA	CC	New	2	G.E.	7FA	340.0			Stellar Energy	
2002	TECO - McAdams Generating Facility	McAdams, MS, USA	CC	New	2	G.E.	7FA	340.0			Stellar Energy	
2002	not disclosed				2	G.E.					Marlo Coil	

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2001	Massac - Mid West Energy	USA-IL		New	2	G.E.	Frame 6	78.0			Munters	
2001	McGuffy	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 Energy	
2001	El Paso - Macae	Macae, RJ, Brazil	SC	New	20	G.E.	LM 6000	968.0	180.0	22%		
2001	Enron International - Electrobolt	Seropedica, RJ, Brazil	SC	New	6	G.E.	LM 6000	290.4	54.0	22%		
2001	Enron International - Electrobolt	Seropedica, RJ, Brazil	SC	New	2	G.E.	LM 6000	96.8	18.0	22%		
2001	Enron North America / Austin Energy	Austin, TX, USA	SC	New	4	G.E.	LM 6000	193.6	36.0	22%		
2001	GE / Calpine - Westbrook Energy Fac	Westbrook, ME, USA	CC	New	2	G.E.	7FA	340.0			Stellar Energy	
2001	Grays Ferry Cogeneration	Philadelphia, PA, USA	CC / CHP	Existing	1	Westinghouse	501	120.0	15.0	15%	Cool Solutions [3]	
2001	Wildflower - Palm Springs	Palm Springs, CA, USA		New	1	G.E.	LM 6000	48.8	9.0	22%		
2001	Wildflower - San Diego	San Diego, CA, USA	SC	New	2	G.E.	LM 6000	97.6	18.0	22%		

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2000	AAF	USA		New	2	ABB	GT 24	340.0			Munters	
2000	City of Vero Beach	USA		Exisiting	1	G.E.	Frame 6	70.0			Munters	
2000	Dahlmann	India		New	1	G.E.	Frame 6F	70.0			Munters	
2000	Dynegy Midwest	USA		Exisiting	4	SW	251	196.0			Munters	
2000	Formosa Plastics	USA-LA		Exisiting	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	McGuffy 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	P&W	FT 8	25.0			Munters	
2000	Soyland Power	USA		Exisiting	2			56.0			Munters	
2000	Trigen-St. Louis Energy	USA		Exisiting	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 Energy	
2000	EMI / Calpine - Tiverton Gen Stn	Tiverton, RI, USA	CC	New	1	G.E.	7FA	170.0			Stellar Energy	
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	22%		
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	22.0	46%		
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	21%	Avalon Consulting	
1999	Illinova -El Paso Energy	Danville, IL, USA	SC	New	4	G.E.	LM 6000	168.4	70.4	60%		

TURBINE INLET COOLING ASSOCIATION (TICA)

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Updated: March 20, 2024

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	Turbine Installation Data								Hot Weather Power Enhancement from TIC [1]		TIC System Developer, Designer, Equipment Supplier(s), or Installer	
Initial Year of TIC Operation	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	60%		
1998	Grays Ferry Cogeneration	Philadelphia, PA, USA	CC / CHP	New	1	Westinghouse	501	120.0	3.5	4%		
1998	Kalaeloa Cogeneration Plant	Kapolei, HI, USA	CC / CHP	Existing	2	ABB	Type 11N	149.2	5.0	4%	Miunters	
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	35%		
1998	Reedy Creek Energy Services	L. Buena Vista, FL, USA	CC / CHP	Existing	1	G.E.	LM 5000	32.0	8.0	31%	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	60%		
1997	Eletronorte - Manaus	Manaus, Brazil	SC	New	2	G.E.	LM 6000	84.2	35.2	60%		
1997	Eletronorte - Porto Velho	Porto Velho, Brazil	SC	New	1	G.E.	LM 6000	42.1	17.6	60%		
1997	Lincoln Electric System - Rokeby	Lincoln, NE, USA	SC	Existing	2			152.5	28.0	21%	Marlo Coil	
1997	Tractebel Power, Inc.	Ripon, CA, USA	CHP	Existing	1	G.E.	LM 5000	52.0	8.0	19%		
1997	Trigen Energy Corporation	Garden City, NY, USA	CC / CHP	Existing	1	G.E.	MS 6001B	42.0	8.0	24%	Cool Solutions [3]	
1997	Trigen-Peoples District Energy	Chicago, IL, USA	SC / CHP	New	3	Turbomeca	Makila TI	3.3	0.9	35%	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	60%		
1996	Princeton U	Princeton, NJ, USA	SC / CHP	New	1	G.E.	LM 1600	14.6	2.0	16%		
1996	Wuxi II	China	SC	New	1	G.E.	LM 6000	42.1	17.6	60%		
1996		Pleasant Hill, MO, USA	SC	Existing	1			71.7	6.0	10%		

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Initial Year of TIC Operation	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	Guayaqil, Ecuador	SC	New	4	G.E.	LM 6000	168.4	70.4	60%		
1995	Emelec	Guayaqil, Ecuador	SC	New	1	G.E.	LM 6000	42.1	17.6	60%		
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	18%		
1995	TECO - Alborado Power Plant	Escuentia, Guatemala	CC	New	2	G.E.	LM 6000	84.2	35.2	60%		
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	60%		
	Texaco Cogeneration Co.	San Ramon, CA, USA	SC / CHP		1			35.8	7.0	23%		
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	60%		
1994	Bechtel / Gilroy	Gilroy, CA, USA	CC	Existing	1	G.E.	Frame 7EA	83.5	17.8	24%		
1994	Kamine - Carthage	Carthage, NY, USA	CC	New	1	G.E.	LM 6000	42.1	17.6	60%		
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	60%		
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	3.7	8%		
1993	North American Chemical Co.	Trona, CA, USA	SC	Existing	1	G.E.	Frame 5	21.0	3.0	20%		
1993	Trigen Energy Corporation	Oklahoma City, OK, USA	SC / CHP	New	1	Turbomeca	Makila TI	1.1	0.3	33%		
1993	Trigen Energy Corporation	Tulsa, OK, USA	SC / CHP	New	1	Turbomeca	Makila TI	1.1	0.3	33%		
1993	City of Fayetteville PWC	Fayetteville, NC, USA	SC & CC	Existing	8	G.E.	Frame 5	220.0	52.0	26%		

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Initial Year of TIC Operation	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 Energy	
1992	El Paso (Destec) - Bear Mountain	Bakersfield, CA, USA	CC	New	1	G.E.	LM 5000	33.8	11.0	46%		
1991	El Paso (Destec) - Live Oak	Bakersfield, CA, USA	CC	New	1	G.E.	LM 5000	33.8	11.0	46%		
1991	El Paso (Destec) - McKittrick	McKittrick, CA, USA	CC	New	1	G.E.	LM 5000	33.8	11.0	46%		
1991	Lincoln Electric System	Lincoln, NE, USA	SC	Existing	1	G.E.	Frame 7B	65.2	14.3	27%		
1990	El Paso (Destec) - Badger Creek	Bakersfield, CA, USA	CC	New	1	G.E.	LM 5000	33.8	11.0	46%		
1988	El Paso (Destec) - Chalk Cliff	Maricopa, CA, USA	CC	New	1	G.E.	LM 5000	33.8	11.0	46%		
1988	Wheelabrator Norwalk Energy Co., Inc.	Norwalk, CA, USA	CC / CHP	New	1	G.E.	LM 2500	22.0	3.3	16%		
1987	El Paso (Destec) - San Joaquin	Lathrop, CA, USA	CC	New	1	G.E.	LM 5000	33.8	11.0	46%		
1975-79		Greenwood, MO, USA	SC	New	4			232.8	14.0	7%		

Footnotes:

[1] Values for Hot Weather Power Enhancement from TIC are relative to design ambient air temperature, not to I.S.O. conditions.
[2]
[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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	Hot Weather CT Plant Power Enhancement from TIC					Evap. Cooling System	Refrigeration System										Inlet Air Heating System	
							Refrigeration Equipment [4]						Thermal Energy Storage (TES) System [4]					
Initial Year of TIC Operation	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)	Evap Media, Fog, or Wet Comp	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	Thermal Storage Capacity (ton-hrs)	Gas, Oil, Steam, Electric, or Cond'r Wtr	Primary Source of Information
2018							29,250	Water	M	Clg Tower	R-123	32,000	9	Daily	CHW	268,641		CB&I / Cool Solutions
2017	1,712.0	95.0	(47% RH)	50.0	1,932.0		56,000	Water	M	Clg Tower	R-123	28,200	12part(6full)	Daily	CHW	315,000		Stellar Energy / power-eng.com
2017							2,276	Water	M	Clg Tower	R-134a	3,414						Turbine Air Systems
2017							2,276	Water	M	Clg Tower	R-134a	3,414						Turbine Air Systems
2017							2,276	Water	M	Clg Tower	R-134a	3,414						Turbine Air Systems
2017							7,974	Water	M	Clg Tower	R-123	3,900						Turbine Air Systems
2017							7,585	Water	M	Clg Tower	R-123	8,720						Turbine Air Systems
2017							htg only											Marlo Coil
2016							930	Water	M	Air Cooled	R-134a	930	6	Daily	CHW	8,370		Turbine Air Systems
2016	1,237.0	98.0	(42% RH)	46.0	1,360.0		28,500	Water	M	Clg Tower	R-123	24,000	10	Daily	CHW	267,800		TAS / CB&I / Cool Solutions
2015							4,420	Water	M	Clg Tower	R-123	4,420						Turbine Air Systems
2015							21,250	Water	M	Clg Tower	R-123	12,000	12	Daily	CHW	144,000		Turbine Air Systems
2015							6,900	Water	M	Air Cooled	R-290	6,900						Turbine Air Systems
2015							7,100	Water	M	Air Cooled	R-290	7,100						Turbine Air Systems
2015							6,900	Water	M	Air Cooled	R-290	6,900						Turbine Air Systems
2015							6,700	Water	M	Air Cooled	R-290	6,700						Turbine Air Systems
2015							14,000	Water	M	Air Cooled	R-290	14,000						Turbine Air Systems
2015							htg pnly											Marlo Coil
2015							htg pnly											Marlo Coil
2014							7,926	Water	M	Clg Tower	R-134a	7,926						Turbine Air Systems
2014							4,950	Water	M	Clg Tower	R-134a	4,950						Turbine Air Systems
2014							1,834	Water	M	Clg Tower	R-123	1,834						Turbine Air Systems
2014																		Marlo Coil
2014																		Marlo Coil
2014							htg only											Marlo Coil
2014							htg only											Marlo Coil
2013							2,050	Water	M	Clg Tower	R-134a	2,050						Turbine Air Systems
2013							800	Water	M	Air Cooled	R-134a	800						Turbine Air Systems
2013							16,500	Water	M	Air Cooled	R-134a	16,500						Turbine Air Systems
2013							3,750	Water	M	Clg Tower	R-123	3,750						Turbine Air Systems
2013							3,500	Water	M	Clg Tower	R-123	3,500						Turbine Air Systems
2013	1,243.0	92.0	(51% RH)	50.0	1,350.0		23,555	Water	M	Clg Tower	R-123	23,448	8 to 10	Daily	CHW	232,000		TAS / DN Tanks / Cool Solutions
2013																		Marlo Coil
2012							5,300	Water	M	Clg Tower	R-123	5,282						Turbine Air Systems
2012							4,800	Water	M	Clg Tower	R-123	4,800						Turbine Air Systems
2012							5,710	Water	M	Clg Tower	R-123	5,710						Turbine Air Systems
2012																		Stellar Energy
2012																		Stellar Energy
2012																		Marlo Coil
2012							htg only											Marlo Coil
2012																		Marlo Coil
2012																		Marlo Coil
2012							htg only											Marlo Coil
2011	24.5	100.0	78.0	50.0	30.5			Water	M	Clg Tower			4 to 8	Daily	CHW	30,000	Cond'r Wtr	U of Texas at Austin / Cool Solutions
2011							2,200	Water	M	Clg Tower	R-123	2,200						Turbine Air Systems
2011																		Turbine Air Systems
2011																		Turbine Air Systems

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							Refrigeration Equipment [4]						Thermal Energy Storage (TES) System [4]					
Initial Year of TIC Operation	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)	Evap Media, Fog, or Wet Comp	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	Thermal Storage Capacity (ton-hrs)	Gas, Oil, Steam, Electric, or Cond'r Wtr	Primary Source of Information
2011							11,500	Water	M	Clg Tower	R-123	11,500						Turbine Air Systems
2011							3,800	Water	M	Clg Tower	R-123	3,800						Turbine Air Systems
2011																		Stellar Energy
2011																		Stellar Energy
2011	41.0	122.0	84.1	55.0	84.3		4,094	Water	M	Clg Tower	R-123	4,094						Turbine Air Systems
2011																		Marlo Coil
2010	32.3	92.0			42.8			Water	M	Clg Tower			5 to 8	Daily	CHW	64,285		TECO / Cool Solutions
2010	80.0	100.0			100.0			Water	M	Clg Tower								Orange Grove Energy / Calif Energy Comm
2010																		Turbine Air Systems
2010																		Stellar Energy
2010																		Stellar Energy
2010	445.6	95.0	76.2	50.0	505.9		11,610	Water	M	Clg Tower	R-123	7,871	7	Daily	CHW	78,710		DN Tanks / Cool Solutions
2010	166.8	89.0	68.9	46.0	201.6		5,290	Water	M	Clg Tower	R-123	5,290						Turbine Air Systems
2010	167.0	90.0	74.3	49.0	196.9		6,450	Water/PG	M	Clg Tower	R-123	6,450						Turbine Air Systems
2010	167.0	90.0	74.3	49.0	197.1		6,450	Water/PG	M	Clg Tower	R-123	6,450						Turbine Air Systems
2010							htg only										Electric	Turbine Air Systems
2010							htg only										Gas	Turbine Air Systems
2010							11,500	Water	M	Clg Tower	R-123	11,500						Turbine Air Systems
2010	73.5	101.0	77.3	45.0	98.0		4,359	Water	M	Clg Tower	R-123	4,359						Turbine Air Systems
2010	235.6	95.0	75.3	50.0	271.5		5,831	Water	M	Clg Tower	R-123	3,804	5	Daily	CHW	28,989		Turbine Air Systems / DN Tanks
2010							htg only											Marlo Coil
2009	27.0	90.0		60.0	30.0		1,000	Water	M					Daily	CHW	38,000		Lanny Joyce (Cornell U)
2009								Water					5	Daily	CHW	39,000		Sempra / DN Tanks
2009								Water							CHW	55,500		Stellar Energy
2009	922.4	95.0	75.3	50.0	1,023.6		21,736	Water	M	Clg Tower	R-123	14,524	5	Daily	CHW	110,016		Turbine Air Systems / DN Tanks
2009	61.5	115.0	72.4	46.0	97.5		3,500	Water	M	Clg Tower	R-123	3,500						Turbine Air Systems
2009	445.7	95.0	77.1	60.5	494.1		8,010	Water	M	Clg Tower	R-123	8,010						Turbine Air Systems
2009	447.3	94.0	78.2	50.0	498.7		13,650	Water/PG	M	Seawater	R-123	13,650						Turbine Air Systems
2009	447.3	94.0	78.2	50.0	498.7		13,650	Water/PG	M	Seawater	R-123	13,650						Turbine Air Systems
2009		97.0	74.0	56.0				Glycol	M	Lake Wtr	R-134a	8,200						Stellar Energy
2009		97.0	74.0	48.0				Glycol	M	Lake Wtr	R-134a	6,600						Stellar Energy
2009		96.8	73.4	45.8				Glycol	M	Clg Tower	R-134a	4,875					Electric	Stellar Energy
2009						media												Munters
2009		100.0	74.0			media												Munters
2009		92.0	75.0			media												Munters
2009	891.3	95.0	75.0	50.0	1006.2		21,509	Water	M	Clg Tower	R-123	11,198	6	Daily	CHW	129,000		CB&I / Cool Solutions
2009							500	Water	A / M	Clg Tower	LiBr / R-123	2,700						Turbine Air Systems
2009		97.0	83.0			media												Munters
2009																		Marlo Coil
2009							htg only											Marlo Coil
2009							htg only											Marlo Coil
2009																		Marlo Coil
2008		122.0		50.0			128,000	Water	A	Air Cooled	H2O-NH3		5	Daily	CHW	710,000		Apina
2008	80.9	96.0	78.0	48.0	96.5		4,300	Water	M	Clg Tower	R-123	4,300						Turbine Air Systems
2008	131.7	82.4	78.4	46.4	145.5		6,225	Water	M	Clg Tower	R-123	6,225						Turbine Air Systems
2008	98.4	122.0	90.0	74.0	133.5		4,750	Water	M	Clg Tower	R-123	4,750						Turbine Air Systems
2008	196.8	122.0	82.0	70.0	271.5		10,000	Water	M	Clg Tower	R-123	10,000						Turbine Air Systems
2008	445.7	95.0	75.0	50.0	503.1		10,755	Water	M	Clg Tower	R-123	5,599						Turbine Air Systems
2008	45.7	90.0	77.4	62.0	56.2		1,800	Water	A	Clg Tower	LiBr	1,800						Turbine Air Systems
2008	72.9	110.0	76.9	46.0	100.0		4,450	Water	M	Air Cooled	R-22	4,450						Turbine Air Systems
2008	431.2	104.0	67.0	55.0	492.2		8,300	Water	M	Air Cooled	R-717	8,300						Turbine Air Systems
2008	157.4	100.0	75.3	46.0	191.6		7,300	Water	M	Air Cooled	R-717	7,300					Electric	Turbine Air Systems

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	Hot Weather CT Plant Power Enhancement from TIC					Evap. Cooling System	Refrigeration System										Inlet Air Heating System	
							Refrigeration Equipment [4]						Thermal Energy Storage (TES) System [4]					
Initial Year of TIC Operation	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)	Evap Media, Fog, or Wet Comp	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	Thermal Storage Capacity (ton-hrs)	Gas, Oil, Steam, Electric, or Cond'r Wtr	Primary Source of Information
2008	96.9	59.0	51.5	48.0	99.2		500	Water	M	Clg Tower	R-123	500						Turbine Air Systems
2008		86.0	70.0			media												Munters
2008		86.0	70.0			media												Munters
2008		90.0	63.0			media												Munters
2008		90.0	68.0			media												Munters
2008		86.0	70.0			media												Munters
2008		84.0	66.0			media												Munters
2008		86.0	70.0			media												Munters
2008		86.0	70.0			media												Munters
2008		94.0	60.0			media												Munters
2008						media												Munters
2008						media												Munters
2008		99.0	67.0			media												Munters
2008		88.0	73.0			media												Munters
2008		96.0	72.0			media												Munters
2008		82.0	66.0			media												Munters
2008		109.0	71.0			media												Munters
2008		109.0	74.0			media												Munters
2008		89.0	73.0			media												Munters
2008		97.0	77.0			media												Munters
2008		91.0	73.0			media												Munters
2008		96.0	60.0			media												Munters
2008		94.0	60.0			media												Munters

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							Refrigeration Equipment [4]						Thermal Energy Storage (TES) System [4]					
Initial Year of TIC Operation	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)	Evap Media, Fog, or Wet Comp	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	Thermal Storage Capacity (ton-hrs)	Gas, Oil, Steam, Electric, or Cond'r Wtr	Primary Source of Information
2007		100.0	70.0			media												Munters
2007		99.0	63.0			media												Munters
2007		92.0	74.0			media												Munters
2007		97.0	71.0			media												Munters
2007		86.0	70.0			media												Munters
2007		96.0	72.0			media												Munters
2007		91.0	63.0			media												Munters
2007		102.0	79.0			media												Munters
2007		117.0	69.0			media												Munters
2007		107.0	75.0			media												Munters
2007						media												Munters
2007						media												Munters
2007		91.0	63.0			media												Munters
2007		92.0	77.0			media												Munters
2007		109.0	71.0			media												Munters
2007		104.0	70.0			media												Munters
2007		92.0	84.0	85.2		media												Munters
2007		86.0	70.0			media												Munters
2007		86.0	70.0			media												Munters
2007		90.0	71.0			media												Munters
2007		91.0	63.0			media												Munters
2007		91.0	73.0			media												Munters
2007	67.8	89.6	81.1	70.3	72.6		913	Water	A	Clg Tower	LiBr-H2O	1,000						John Andrepont (Cool Solutions)
2007	1,067.0	92.0	76.0	60.0	1,227.0		21,000	Glycol	M	Sea Water	R-134a	21,800						Stellar Energy
2007								Water	M	Clg Tower	R-123							Turbine Air Systems
2006		104.0	65.0			media												Munters
2006		110.0	70.0			media												Munters
2006						media												Munters
2006		92.0	72.0			media												Munters
2006		92.0	72.0			media												Munters
2006		86.0	70.0			media												Munters
2006		86.0	70.0			media												Munters
2006						media												Munters
2006		90.0	69.0			media												Munters
2006		92.0	70.0			media												Munters
2006						media												Munters
2006						media												Munters
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	Hot Weather CT Plant Power Enhancement from TIC					Evap. Cooling System	Refrigeration System										Inlet Air Heating System	
							Refrigeration Equipment [4]						Thermal Energy Storage (TES) System [4]					
Initial Year of TIC Operation	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)	Evap Media, Fog, or Wet Comp	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	Thermal Storage Capacity (ton-hrs)	Gas, Oil, Steam, Electric, or Cond'r Wtr	Primary Source of Information
2005						media												Munters
2005						media												Munters
2005						media												Munters
2005						media												Munters
2005						media												Munters
2005						media												Munters
2005						media												Munters
2005						media												Munters
2005						media												Munters
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2005						media												Munters
2005						media												Munters
2005						media												Munters
2005						media												Munters
2005						media												Munters
2005	82.0	101.0	71.0	48.0	97.0		3,350	Glycol	M	Clg Tower	R-134a	3,400					Electric	Stellar Energy
2005	82.0	89.0	68.0	48.0	97.0		3,400	Glycol	M	Clg Tower	R-134a	3,450						Stellar Energy
2005								Water	M	Clg Tower	R-134a	10,000						South-Port Systems
2005							300	Water	A + M	Clg Tower	various		6	Daily	CHW	8,000		Distributed Energy, Jul / Aug 2005
2005	76.2	105.0	79.0	50.0	96.0			Water	M	Clg Tower	R-123	5,000						Turbine Air Systems
2005	29.4	94.0	79.0	48.0	43.9			Ammonia	M	Air cooled	R-717	2,000						Turbine Air Systems
2005	29.4	94.0	79.0	48.0	43.9			Ammonia	M	Air cooled	R-717	2,000						Turbine Air Systems
2005	111.2	108.0	87.0	73.4	135.1			Water	M	Clg Tower	R-123	4,800						Turbine Air Systems
2005		122.0		54.5			29,700	Water	M	Dry Rad's	R-134a	11,100	6	Daily	CHW	192,800		Stellar Energy
2005	81.4	95.0	78.0	48.0	96.1			Water	M	Clg Tower	R-123	4,000						Turbine Air Systems
2005	74.1	107.0	74.0	47.0	102.1			Water	M	Clg Tower	R-123	3,200						Turbine Air Systems
2005	12.5	98.0		42.0	15.0			SoCool	M	Clg Tower	various	20,000	4	Daily	SoCool	40,000		John Andrepont (Cool Solutions)
2005	69.9	115.0	72.0	46.0	94.9			Water	M	Clg Tower	R-123	3,500						Turbine Air Systems

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	Hot Weather CT Plant Power Enhancement from TIC					Evap. Cooling System	Refrigeration System										Inlet Air Heating System	
							Refrigeration Equipment [4]						Thermal Energy Storage (TES) System [4]					
Initial Year of TIC Operation	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)	Evap Media, Fog, or Wet Comp	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	Thermal Storage Capacity (ton-hrs)	Gas, Oil, Steam, Electric, or Cond'r Wtr	Primary Source of Information
2004							35,100	Water	A + M	Clg Tower				Daily	CHW	49,000		US DOE / Midwest Cogen Association
2004						media												Munters
2004						media												Munters
2004						media												Munters
2004						media												Munters
2004						media												Munters
2004						media												Munters
2004						media												Munters
2004						media												Munters
2004						media												Munters
2004						media												Munters
2004						media												Munters
2004								Water	A	Clg Tower	LiBr-H2O	2,500						Distributed Energy, Jul / Aug 2005
2004	37.9	105.0	79.0	50.0	48.0			Water	M	Clg Tower	R-123	2,550						Turbine Air Systems
2004	40.7	95.0	75.0	47.5	48.3			Water	M	Clg Tower	R-123	2,000						Turbine Air Systems
2004	115.3	113.0	76.0	48.0	174.2			Water	M	Clg Tower	R-123	7,000						Turbine Air Systems
2004	28.8	113.0	80.0	48.0	42.9			Water	M	Air cooled	R-134a	2,200						Turbine Air Systems
2004		95.0		55.0			200	Water	M	Air cooled		200						ASHRAE Journal, Aug 2005, pp 48-50
2004	19.4	95.0	82.7	55.0	22.1			Water	M	Clg Tower								Tom Tillman (TAS)
2004	77.2	102.0	71.0	48.0	99.4		2,764	Water	M	Clg Tower	R-123	3,200						Turbine Air Systems
2004	419.8	92.0	73.0	50.0	484.2		8,540	Water	M	Clg Tower	R-123	8,610						Turbine Air Systems
2004	1,015.0	96.0	78.0	52.0	1,142.6		21,704	Water	M	Clg Tower	R-123	22,200						Turbine Air Systems
2004	154.0	103.0	79.0	48.0	191.9			Water	M	Clg Tower	R-123	8,350						Turbine Air Systems
2004	81.4	95.5	82.5	48.0	95.2			Water	M	Clg Tower	R-123	5,100						Turbine Air Systems
2003	105.0	100.0	82.0		135.0		4,669	Water	M			4,669						Missouri River Energy
2003						media												Munters
2003						media												Munters
2003						media												Munters
2003						media												Munters
2003						media												Munters
2003	122.1	95.0	75.0	48.0	149.1		6,000	Water	M	Clg Tower	R-123	6,000						Turbine Air Systems
2003								Water			R-134a	2,200						Stellar Energy
2003	580.8	93.4	76.9	52.0	639.8		11,090	Water	M	Clg Tower	R-123	11,360						Turbine Air Systems
2003	40.7	95.0	75.0	48.0	49.7		1,701	Glycol	M	Clg Tower	R-123	2,500					Electric	Turbine Air Systems
2003								Glycol	M	Clg Tower	R-134a	8,000						Stellar Energy
2003								Glycol	M	Clg Tower	R-134a	14,000						Stellar Energy
2003								Glycol	M	Clg Tower	R-134a	8,000						Stellar Energy
2003								Glycol	M	Clg Tower	R-134a	24,000						Stellar Energy
2003								Glycol	M	Clg Tower	R-134a	24,000						Stellar Energy
2003	40.7	95.0	75.0	48.0	49.7		1,694	Glycol	M	Clg Tower	R-123	2,000						Turbine Air Systems

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							Refrigeration Equipment [4]						Thermal Energy Storage (TES) System [4]					
Initial Year of TIC Operation	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)	Evap Media, Fog, or Wet Comp	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	Thermal Storage Capacity (ton-hrs)	Gas, Oil, Steam, Electric, or Cond'r Wtr	Primary Source of Information
2002						media												Munters
2002						media												Munters
2002						media												Munters
2002						media												Munters
2002						media												Munters
2002						media												Munters
2002						media												Munters
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2002						media												Munters
2002						media												Munters
2002						media												Munters
2002								Water			R-134a	4,000						Stellar Energy
2002	40.7	95.0	75.0	48.0	49.7		1,701	Glycol	M	Clg Tower	R-123	2,000					Steam	Turbine Air Systems
2002	40.7	95.0	75.0	48.0	49.7		1,701	Glycol	M	Clg Tower	R-123	2,500					Electric	Turbine Air Systems
2002	40.7	95.0	75.0	48.0	49.7		1,701	Glycol	M	Clg Tower	R-123	2,500					Electric	Turbine Air Systems
2002	122.1	95.0	75.0	48.0	149.1		5,103	Glycol	M	Clg Tower	R-123	7,500					Electric	Turbine Air Systems
2002	40.7	95.0	75.0	48.0	49.7		1,701	Glycol	M	Clg Tower	R-123	2,500					Electric	Turbine Air Systems
2002	40.7	95.0	75.0	48.0	49.7		1,701	Glycol	M	Clg Tower	R-123	2,500					Electric	Turbine Air Systems
2002	40.7	95.0	75.0	48.0	49.7		1,701	Glycol	M	Clg Tower	R-123	2,500					Electric	Turbine Air Systems
2002	162.8	93.0	68.0	48.0	198.8		7,480	Glycol	M	Clg Tower	R-123	10,000					Electric	Turbine Air Systems
2002	40.7	95.0	75.0	48.0	49.7		1,701	Glycol	M	Clg Tower	R-123	2,500					Electric	Turbine Air Systems
2002	40.7	95.0	75.0	48.0	49.7		1,701	Glycol	M	Clg Tower	R-123	2,500					Electric	Turbine Air Systems
2002	40.7	95.0	75.0	48.0	49.7		1,701	Glycol	M	Clg Tower	R-123	2,500					Electric	Turbine Air Systems
2002								Glycol	M	Clg Tower	R-134a	10,000						Stellar Energy
2002								Glycol	M	Clg Tower	R-134a	14,000						Stellar Energy
2002								Glycol	M	Clg Tower	R-134a	28,000						Stellar Energy
2002								Glycol	M	Clg Tower	R-134a	14,000						Stellar Energy
2002																		Marlo Coil
2002	25.0				37.0			Water	M	Clg Tower	R-134a	2,000						South-Port Systems, Stellar Energy
2002								Water	M	Clg Tower	R-134a	12,000						Stellar Energy
2002								Water	M	Clg Tower	R-134a	12,000						Stellar Energy
2002																		Marlo Coil

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							Refrigeration Equipment [4]						Thermal Energy Storage (TES) System [4]					
Initial Year of TIC Operation	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)	Evap Media, Fog, or Wet Comp	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	Thermal Storage Capacity (ton-hrs)	Gas, Oil, Steam, Electric, or Cond'r Wtr	Primary Source of Information
2001						media												Munters
2001						media												Munters
2001						media												Munters
2001						media												Munters
2001						media												Munters
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2001						media												Munters
2001						media												Munters
2001						media												Munters
2001						media												Munters
2001								Ammonia	M	Evap Cond	R-717	9,000						Stellar
2001	814.0	95.0	75.0	48.0	994.0		37,500	Water	M	Clg Tower	R-123	37,995						Turbine Air Systems
2001	244.2	95.0	75.0	48.0	298.2		15,000	Water	M	Clg Tower	R-123	15,000						Turbine Air Systems
2001	81.4	95.0	75.0	48.0	99.4		5,000	Water	M	Clg Tower	R-123	5,000						Turbine Air Systems
2001	162.8	95.0	75.0	48.0	198.8		7,500	Glycol	M	Clg Tower	R-123	7,500					Gas / Oil	Turbine Air Systems
2001								Ammonia			R-717	9,000						Stellar Energy
2001	100.0				115.0	wet comp											Steam	John Andrepont (Cool Solutions)
2001	41.0				50.0			Water	M	Clg Tower	R-134a	2,200						South-Port Systems
2001	82.0				100.0			Water	M	Clg Tower	R-134a	2,200						South-Port Systems

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	Hot Weather CT Plant Power Enhancement from TIC					Evap. Cooling System	Refrigeration System										Inlet Air Heating System	
							Refrigeration Equipment [4]						Thermal Energy Storage (TES) System [4]					
Initial Year of TIC Operation	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)	Evap Media, Fog, or Wet Comp	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	Thermal Storage Capacity (ton-hrs)	Gas, Oil, Steam, Electric, or Cond'r Wtr	Primary Source of Information
2000						media												Munters
2000						media												Munters
2000						media												Munters
2000						media												Munters
2000						media												Munters
2000						media												Munters
2000						media												Munters
2000						media												Munters
2000						media												Munters
2000						media												Munters
2000						media												Munters
2000						media												Munters
2000						media												Munters
2000						media												Munters
2000						media												Munters
2000						media												Munters
2000								Ammonia	M	Evap Cond	R-717	6,600						Stellar Energy
2000								Ammonia	M	Evap Cond	R-717	6,600						Stellar Energy
2000	22.2	88.0			24.6	media												Energy-Tech, Oct 2004 Supplement, p 10
2000	284.9	95.0	75.0	48.0	347.9		14,000	Water	M	Clg Tower	R-123	14,000						Turbine Air Systems
1999						media												Munters
1999						media												Munters
1999						media												Munters
1999						media												Munters
1999						media												Munters
1999						media												Munters
1999						media												Munters
1999						media												Munters
1999						media												Munters
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1999						media												Munters
1999						media												Munters
1999						media												Munters
1999						media												Munters
1999						media												Munters
1999						media												Munters
1999						media												Munters
1999						media												Munters
1999	48.0	95.0	75.0	48.0	70.0		5,000	Water	M	Clg Tower	R-123	5,000						Turbine Air Systems
1999		99.0	75.0	60.2			178	Water	A & M	Clg Tower	various	8,200						IDEA Proceedings, 6/99
1999	234.1	95.0	80.0	50.0	283.1		18,700	Water	A & M	Clg Tower	LiBr / R-123	7,663	10	Daily	CHW	107,000		Turbine Air Systems
1999	117.2	95.0	75.0	48.0	187.6		8,800	Water	M	Clg Tower	R-123	8,800						Turbine Air Systems

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	Hot Weather CT Plant Power Enhancement from TIC					Evap. Cooling System	Refrigeration System										Inlet Air Heating System	
							Refrigeration Equipment [4]						Thermal Energy Storage (TES) System [4]					
Initial Year of TIC Operation	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)	Evap Media, Fog, or Wet Comp	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	Thermal Storage Capacity (ton-hrs)	Gas, Oil, Steam, Electric, or Cond'r Wtr	Primary Source of Information
1998						media												Munters
1998						media												Munters
1998						media												Munters
1998						media												Munters
1998						media												Munters
1998						media												Munters
1998						media												Munters
1998						media												Munters
1998							50	Water	A & M	River Wtr	R-717	6,200	10	Daily	CHW	39,800		ASHRAE MN-00-16-2, 1/00
1998	29.3	95.0	75.0	48.0	46.9		2,200	Water	M	Clg Tower	R-123	2,200						South-Port Systems, Turbine Air Systems
1998	100.0				103.5	media											Steam	John Andrepont (Cool Solutions)
1998						media												Energy-Tech, Oct 2004 Supplement, pp 10-11
1998	96.0	98.6		48.2	116.0		9,000	dir. water	M	Evap Cond	R-717	2,130	4	Daily	Ice	36,932		Baltimore Aircoil, doc. SEN10M/3-99
1998	340.0	122.0	67.0	50.0	460.0		19,020	Water	M	Air Cooled	R-717	5,200	5	Daily	Ice	120,000		Chris Landry (TAS)
1998	26.0	95.0	79.0	50.0	34.0		2,000	Water	A & M	Clg Tower	various	14,425	10	Daily	CHW	57,000		IDEA Proceedings, 6/98
1997						media												Munters
1997						media												Munters
1997						media												Munters
1997						media												Munters
1997						media												Munters
1997	87.9	95.0	75.0	48.0	140.7		6,600	Water	M	Clg Tower	R-123	6,600						Turbine Air Systems
1997	58.6	95.0	75.0	48.0	93.8		4,200	Water	M	Clg Tower	R-123	4,200						Turbine Air Systems
1997	29.3	95.0	75.0	48.0	46.9		2,170	Water	M	Clg Tower	R-123	2,170						Turbine Air Systems
1997	134.0	92.0		42.0	162.0		10,000	Water	M	Evap Cond	R-717	1,536		Weekly	Ice	165,000		Paul Mueller Co., TE-2034, 2000
1997	42.0	102.0	69.0	45.0	50.0		2,000	Ammonia	M	Evap Cond	R-717	2,000						Kohlenberger / KACE Energy
1997	33.3	92.0	76.0	46.5	41.3		1,880	Water	A & M	Clg Tower	various	16,400						IDEA Proceedings, 6/00
1997	2.6			50.0	3.5		30	Ammonia	A & M	Evap Cond	R-717	16,800	13	Daily	SoCool	123,000		IDEA Proceedings, 6/00
1996						media												Munters
1996						media												Munters
1996						media												Munters
1996						media												Munters
1996						media												Munters
1996						media												Munters
1996						media												Munters
1996	58.6	95.0	75.0	48.0	93.8		4,000	Water	M	Clg Tower	R-123	4,000						Turbine Air Systems
1996	12.5	98.0		50.0	14.5			Water	M	Clg Tower	various	15,000						Tom Nyquist (Princeton U)
1996	29.3	95.0	75.0	48.0	46.9		2,400	Water	M	Clg Tower	R-123	2,400						Turbine Air Systems
1996	59.0	98.0	75.0		65.0	fog												ASHRAE Design Guide: CTIAC

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							Refrigeration Equipment [4]						Thermal Energy Storage (TES) System [4]					
Initial Year of TIC Operation	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)	Evap Media, Fog, or Wet Comp	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	Thermal Storage Capacity (ton-hrs)	Gas, Oil, Steam, Electric, or Cond'r Wtr	Primary Source of Information
1995						media												Munters
1995						media												Munters
1995						media												Munters
1995	117.2	95.0	75.0	48.0	187.6		7,800	Water	M	Clg Tower	R-123	7,800						Turbine Air Systems
1995	29.3	95.0	75.0	48.0	46.9		2,000	Water	M	Clg Tower	R-123	2,000						Turbine Air Systems
1995								Water	M	Evap Cond	R-290		4	Daily	Ice			Chris Landry (TAS)
1995	67.4	92.0	80.0	50.0	79.2		2,800	Water	A	Clg Tower	LiBr-H2O	2,800						Turbine Air Systems
1995	58.6	95.0	75.0	48.0	93.8		3,750	Water	M	Clg Tower	R-123	3,750						Turbine Air Systems
1995								Water	M		R-22		4	Weekly	Ice			Chris Landry (TAS)
1995	58.6	95.0	75.0	48.0	93.8		2,200	Water	M	Clg Tower	R-123	2,200						Turbine Air Systems
	31.0	95.0		42.0	38.0		1,345	Water	M	Evap Cond	R-717	378		Weekly	Ice	14,800		Paul Mueller Co., TE-2034, 2000
1994						media												Munters
1994						media												Munters
1994						media												Munters
1994						media												Munters
1994						media												Munters
1994						media												Munters
1994	87.9	95.0	75.0	48.0	140.7		5,400	Water	M	Clg Tower	R-123	5,400						Turbine Air Systems
1994	72.7	90.0	66.0	42.8	90.5		2,910	Water	M	Clg Tower	R-22	888	6	Weekly	Ice	40,000		ASHRAE Dsgn Guide: ctiac, Power-Gen 94
1994	29.3	95.0	75.0	48.0	46.9		1,800	Water	M	Clg Tower	R-123	1,800						Turbine Air Systems
1994				50.0				Water	A & M		various	28,000					Yes	IDEA Proceedings, 6/97
1994	29.3	95.0	75.0	48.0	46.9		2,000	Water	M	Clg Tower	R-123	2,000						Turbine Air Systems
1993						media												Munters
1993						media												Munters
1993						media												Munters
1993	48.7	95.0	75.0	78.0	52.4	fog												Tom Tillman (TAS)
1993	15.0	112.0	71.0	42.0	18.0		800	Ammonia	M	Evap Cond	R-717	800						Kohlenberger / KACE Energy
1993	0.9			50.0	1.2		10	Ammonia	M	Clg Tower	R-717	16,100						IDEA Proceedings, 6/00
1993	0.9			50.0	1.2		10	Ammonia	M	Clg Tower	R-717	24,150						IDEA Proceedings, 6/00
1993	200.0	101.0	78.0	40.0	253.0			Water	M	Clg Tower	R-717		4	Weekly	Ice			ASHRAE Design Guide: CTIAC

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1992								Ammonia	M	Evap Cond	R-717	4,000						Stellar Energy
1992	24.0	104.0	70.0	50.0	35.0		800	Water	A	Clg Tower	LiBr-H2O	800						Turbine Air Systems
1991	24.0	104.0	70.0	50.0	35.0		800	Water	A	Clg Tower	LiBr-H2O	800						Turbine Air Systems
1991	24.0	104.0	70.0	50.0	35.0		800	Water	A	Clg Tower	LiBr-H2O	800						Turbine Air Systems
1991	52.6	101.5	78.0	40.0	67.1		3,917	Water	M	Evap Cond	R-717	600	4	Weekly	Ice	45,000		ASHRAE Dsgn Guide: ctiac, EPRI Jrnl O/N 91
1990	24.0	104.0	70.0	50.0	35.0		800	Water	A	Clg Tower	LiBr-H2O	800						Turbine Air Systems
1988	24.0	104.0	70.0	50.0	35.0		800	Water	A	Clg Tower	LiBr-H2O	800						Turbine Air Systems
1988	20.1			50.0	23.4		515	Water	M			1,500	6	Daily	CHW	3,467		Ray Pasteris (Pasteris Energy)
1987	24.0	104.0	70.0	50.0	35.0		1,400	Water	A	Clg Tower	LiBr-H2O	1,400						Turbine Air Systems
1975-79	198.0	97.0	75.0	78.3	212.0	media												ASHRAE Design Guide: CTIAC