ATTACHMENT A

Comparison Tables – DG Costs, Benefits, Values, and Cost Effectiveness Tests

Table 1: Participant Test							
Category	**Value**	**Source**	**Support**	**Oppose**	**SPM**	**Itron**	**Adopted**
Benefits							
Reduced electricity bills	IOU tariff DG production data	IOUs SGIP studies	All		Yes	Yes	Yes
Combined heat and power gas and electric bill savings	Market price or IOU rates DG production data	IOU tariffs, various published sources, SGIP studies	All		Yes	Yes	Yes
Additional CHP efficiency adder	DG production data	DG operator SGIP studies	CCDC			Yes	Yes
Rebates/Incentives	Customer specific	CPUC,CEC,SMUD, LADWP	All		Yes	Yes	Yes
Standby charge exemption	IOU rates, DG production data	IOU tariffs, SGIP studies	IOUs		N/A	No	Yes
Tax credits/depreciation	Current approved levels	IRS, FTB	All		Yes	Yes	Yes
Reliability, backup power, voltage support	Project specific estimate	Parties to develop estimates	All		N/A	No	Yes
Costs							
DG system and emission controls purchase, interconnection, emission offset purchases	Actual charges from manufacturer and installer. Estimated IOU interconnection costs until CEC final estimates adopted.	Manufacturer, SGIP studies, IOU tariffs and estimates	All		Yes	Yes	Yes
Operation and maintenance	Actual charges and historical fuel costs	DG operational data, SGIP studies	All		Yes	Yes	Yes
Nonbypassable charges (PGC, DWR, Nuclear decomm., WDAT)	IOU rates	IOU tariffs	IOUs		Yes	Yes	Yes

Comparison Tables – DG Costs, Benefits, Values, and Cost Effectiveness Tests

Table 2: Non Participant or Ratepayer Impact Test							
Category	**Value**	**Source**	**Support**	**Oppose**	**SPM**	**Itron**	**Adopted**
Benefits							
Avoided purchase of commodity and capacity costs	E3	www.ethree.com CPUC Avoided26.xls	All		Yes	Yes	Yes
Avoided T&D costs	1. Site specific. Must meet D.03-02-068 criteria 2. E3	1. GRC marginal costs, site-specific avoided costs. 2. www.ethree.com CPUC Avoided26.xls	1. IOUs 2. CCDC, CAC/ EPUC, ASPv		Yes	Yes	Retains D.03-02-068 criteria
Reliability net benefits	E3	www.ethree.com CPUC Avoided26.xls	All		Yes	Yes	Yes
Environmental	1. E3 2. Actual power plant avoided emissions	1. NYMEX futures 2. Actual costs	1. Most 2. CCDC	PG&E-already captured elsewhere	Yes	Yes	Yes, as modified by CCDC
CHP waste heat	E3	www.ethree.com CPUC Avoided26.xls	All		Yes	Yes	Yes
CHP efficiency adder	Project-specific	Manufacturer, SGIP studies	CCDC, SDGE/ SCG		No	No	Yes
Increased revenue from fuel transportation for gas-fired DG	IOU rates	IOU tariffs	IOUs		Yes	Yes	
Market price impacts/elasticity	E3	www.ethree.com CPUC Avoided26.xls	All		Yes	Yes	Yes
Costs							
Reduced commodity revenue due to electric bill savings	IOU rates and DG production data	IOU tariffs, SGIP studies	All		Yes	Yes	Yes
Reduced T&D revenues	IOU rates, DG production data	IOU tariffs, SGIP studies	IOUs	CAC/EPUC	Yes	Yes	Yes
Reduced revenue from standby charge exemptions	IOU rates	IOU tariffs	IOUs		No	No	Yes
Utility incentives	Customer specific	CEC or CPUC	All		Yes	Yes	Yes
Program administration	IOU cost estimates	IOUs	All		Yes	Yes	Yes

Comparison Tables – DG Costs, Benefits, Values, and Cost Effectiveness Tests

Table 2: Non Participant/RIM Test cont'd.							
Category	**Values**	**Source**	**Support**	**Oppose**	**SPM**	**Itron**	**Adopted**
Costs							
Utility interconnection not charged to DG customer	IOU estimates until CEC final values adopted	IOUs	All		Yes	Yes	Yes
Increased IOU fuel transporation costs for gas-fired DG	IOU gas rates	IOU tariffs	IOUs		Yes	Yes	Yes
Reduced gas commodity revenues	Market price, IOU gas tariff DG production data	Various published sources, IOU tariffs, SGIP studies	All		Yes	Yes	Yes

Comparison Tables – DG Costs, Benefits, Values, and Cost Effectiveness Tests

Table 3: Societal/Total Resource Cost Test							
Category	**Value**	**Source**	**Support**	**Oppose**	**SPM**	**Itron**	**Adopted**
Benefits							
Avoided electricity commodity and capacity costs	E3	www.ethree.com	All		Yes	Yes	Yes
Avoided T&D costs	Site specific. Must meet criteria in D.03-02-068 E3	Utilty-specific GRC marginal costs, site specific avoided costs. Large DG may require IOU engineering study www.ethree.com CPUC Avoided26.xls	IOUs CCDC,CAC/EPUC, ASPv		Yes	Yes	Retains D.03-02-068 criteria
Environmental benefits	1. E3 2. Actual power plants avoided emissions	1. www.ethree.com CPUC Avoided26.xls 2. CEC power mix estimates	1. All 2. CCDC, ASPv		Yes	Yes	Yes, as modified by CCDC
Reliability net benefits	E3	www.ethree.com CPUC Avoided26.xls	All		Yes	Yes	Yes
Reduced line losses	E3 if under 100kW, IOU estimates if over 100kW	www.ethree.com CPUC Avoided26.xls, IOU estimates	All		N/A	Yes	Yes
Waste heat from CHP	E3	www.ethree.com CPUC Avoided26.xls	All		Yes	Yes	Yes
CHP efficiency adder	Project specific estimates	Manufacturer, SGIP studies	CCDC,SDGE/SCG		No	No	Yes
Market price impacts/elasticity	E3	www.ethree.com CPUC Avoided26.xls	All		Yes	Yes	Yes
Market transformation effects	None cited.		PV Now, ASPv, CalSEIA, City of San Diego		No	No	Referred to R.04-04-025

ATTACHMENT A

Comparison Tables – DG Costs, Benefits, Values, and Cost Effectiveness Tests

Table 3: Societal/TRC Test cont'd.							
Category	**Values**	**Source**	**Support**	**Oppose**	**SPM**	**Itron**	**Adopted**
Costs							
DG system purchase, emissions control equipment, one-time emissions offset purchase, interconnection	Actual project costs, IOU interconnection cost estimates	Manufacturer, SGIP studies, CEC, Rule 21, IOUs	All		Yes	Yes	Yes
Operation maintenance, fuel, ongoing emission offset purchases	Actual and historical market costs	Manufacturer, SGIP studies	All		Yes	Yes	Yes
Removal less salvage value	E3	www.ethree.com CPUC Avoided26.xls	All		Yes	Yes	Yes
IOU administrative costs	IOU estimates until CEC final interconnection values adopted	IOUs, CEC.	All		Yes	Yes	Yes

(END OF ATTACHMENT A)

ATTACHMENT B

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