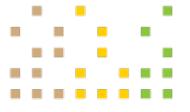
## **Food Service Subcommittee**

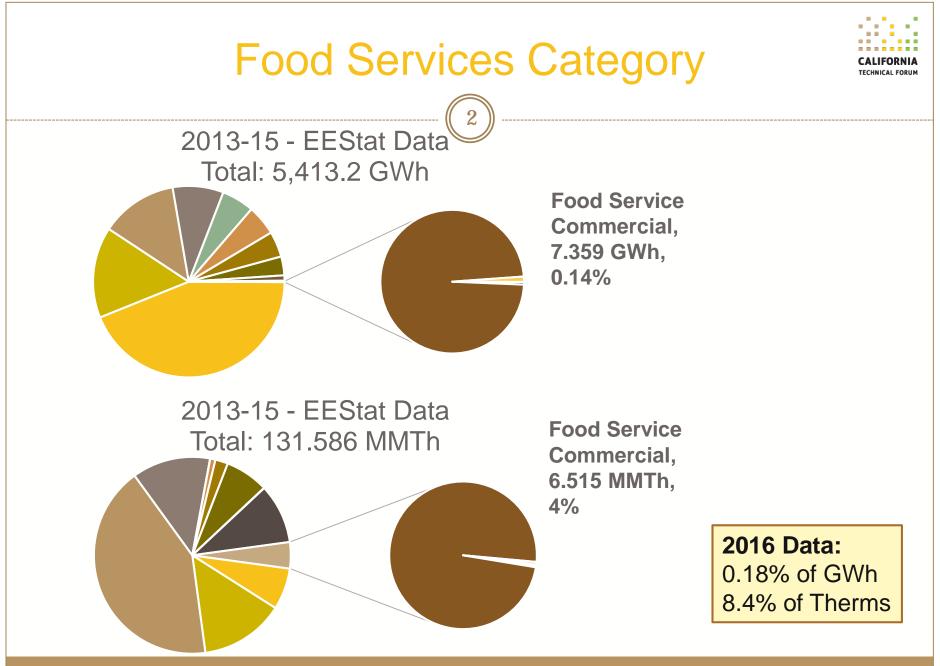
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CALIFORNIA

TECHNICAL FORUM

AYAD AL-SHAIKH APRIL 2017



Food Services

#### Participation Primarily Through Core Deemed Programs



			Sum of Gross	Sum of	Sum of Gross
EndUse 💷	PA 🖵	ProgramName	GWh	Gross MW	MMTh
Food Service	SDGE	SW-COM Direct Install			0.00
		SW-COM-Deemed Incentives-Commercial Rebates	0.04	0.01	0.07
		SW-IND-Deemed Incentives	0.00	0.00	
	SCG	3P-IDEEA365-Instant Rebates! Point-of-Sale Foodservice	-	-	0.59
		3P-PREPPS			0.01
		COM-Deemed Incentives	-	-	0.87
		IND-Deemed Incentives			0.03
		RES-MFEER	-	-	0.00
		RES-Plug Load and Appliances	-	-	0.00
		RES-Plug Load and Appliances - POS	-	-	0.02
	SCE	Commercial Calculated Program	0.11	0.02	
		Commercial Deemed Incentives Program	1.38	0.29	_
		Savings By Design	0.18	0.05	
	<b>PGE</b>	Agricultural Deemed Incentives	0.01	0.00	0.01
		Commercial Deemed Incentives	0.74	0.14	0 <mark>.63</mark>
		Hospitality Program	0.22	0.03	0.01
		School Energy Efficiency	_	_	0.01
Grand Total			2.68	0.53	2.25

3

4



	-	Energy_		_	<u>Energy</u>
<u>Category</u>	<u> </u>	<u>(kWh/yr)</u>	<b>Category</b>	(	<u>therms/yr)</u>
Lighting	68%	616,618,770	Lighting	-139%	
HVAC / Motors	13%		HVAC / Motors	31%	1,
Agr / Pumps	5%		Agr / Pumps	0%	
Whole Building	4%		Whole Building	0%	
Appl or Plug Load	3%		Appl or Plug Load	9%	
<b>Com Refrigeration</b>	3%		<b>Com Refrigeration</b>	8%	
Pools	3%		Pools	10%	
Food Service	0.4%		Food Service	46%	2,2
Bldg Envelope	0.2%		Bldg Envelope	19%	
Water Heating	0.2%		Water Heating	117%	5,900,737
Total:		911,794,869	Total:		5,048,002

#### **Food Services**

5/1/2017

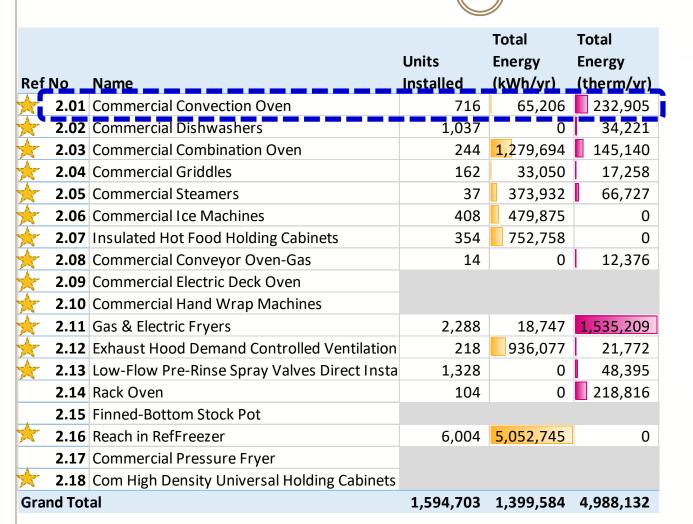
5

Ref No	Name	Units Installed	Total Energy (kWh/yr)	Total Energy (therm/yr)
2.01	Commercial Convection Oven	716	65,206	232,905
2.02	Commercial Dishwashers	1,037	0	34,221
2.03	Commercial Combination Oven	244	1,279,694	145,140
2.04	Commercial Griddles	162	33,050	17,258
2.05	Commercial Steamers	37	373,932	66,727
2.06	Commercial Ice Machines	408	479,875	0
2.07	Insulated Hot Food Holding Cabinets	354	752,758	0
2.08	Commercial Conveyor Oven-Gas	14	0	12,376
2.11	Gas & Electric Fryers	2,288	18,747	1,535,209
2.12	Exhaust Hood Demand Controlled Ventilation	218	936,077	21,772
2.13	Low-Flow Pre-Rinse Spray Valves Direct Insta	1,328	0	48,395
2.14	Rack Oven	104	0	218,816
2.16	Reach in RefFreezer	6,004	5,052,745	0
Grand Tot	al	1,594,703	1,399,584	4,988,132

		Energy
Category		<u>(kWh/yr)</u>
Lighting	68%	616,618,770
HVAC / Motors	13%	
Agr / Pumps	5%	
Whole Building	4%	
Appl or Plug Load	3%	
<b>Com Refrigeration</b>	3%	
Pools	3%	
Food Service	0.4%	
Bldg Envelope	0.2%	
Water Heating	0.2%	
Total:		911,794,869

CALIFORNIA TECHNICAL FORUM

	<u> </u>	Energy	
Category	<u>(†</u>	therms	<u>/yr)</u>
Lighting	-139%		
HVAC / Motors	31%		1
Agr / Pumps	0%		
Whole Building	0%		
Appl or Plug Load	9%		
<b>Com Refrigeration</b>	8%		
Pools	10%		
Food Service	46%		2,2
Bldg Envelope	19%		
Water Heating	117%		5,900,737
Total:		5,04	8,002



#### Full-Size Convection Oven

ECHNICAL FORUM



**Food Services** 

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(Images are examples of technology, but not intended as a product endorsement.)



8



				Total	Total
			Units	Energy	Energy
RefNo	כ	Name	Installed	(kWh/yr)	(therm/yr)
22	01	Commercial Convection Oven	716	65 206	232 905
2	.02	Commercial Dishwashers	1,037	0	34,221
2	.03	Commercial Combination Oven	244	<b>1,</b> 279,694	145,140
2	.04	Commercial Griddles	162	33,050	17,258
2	.05	Commercial Steamers	37	373,932	66,727
2	.06	Commercial Ice Machines	408	479,875	0
2	.07	Insulated Hot Food Holding Cabinets	354	752,758	0
2 🏹	.08	Commercial Conveyor Oven-Gas	14	0	12,376
2 🏹	.09	Commercial Electric Deck Oven			
2	.10	Commercial Hand Wrap Machines			
2	.11	Gas & Electric Fryers	2,288	18,747	1,535,209
2	.12	Exhaust Hood Demand Controlled Ventilation	218	936,077	21,772
2 🏹	.13	Low-Flow Pre-Rinse Spray Valves Direct Insta	1,328	0	48,395
2	.14	Rack Oven	104	0	218,816
2	.15	Finned-Bottom Stock Pot			
2 🦈	.16	Reach in RefFreezer	6,004	5,052,745	0
2	.17	Commercial Pressure Fryer			
2	.18	Com High Density Universal Holding Cabinets			
Grand	Tot	al	1,594,703	1,399,584	4,988,132



Jackson Tempstar® Ventless Door-Type Dishwashing Machine

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**Food Services** 

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9

Ref	No	Name	Units Installed	Total Energy (kWh/yr)	Total Energy (therm/yr)	
*	2.01	Commercial Convection Oven	716	65,206	232,905	
*	2.02	Commercial Dishwashers	1.037	0	34.221	
$\star$	2.03	Commercial Combination Oven	244	1,279,694	145,140	j
*	2.04	Commercial Griddles	162	33,050	17,258	
*	2.05	Commercial Steamers	37	373,932	66,727	
*	2.06	Commercial Ice Machines	408	479,875	0	Combination Oven:
*	2.07	Insulated Hot Food Holding Cabinets	354	752,758	0	4
$\bigstar$	2.08	Commercial Conveyor Oven-Gas	14	0	12,376	BK!
$\bigstar$	2.09	Commercial Electric Deck Oven				
$\bigstar$	2.10	Commercial Hand Wrap Machines				
$\bigstar$	2.11	Gas & Electric Fryers	2,288	18,747	1,535,209	
$\bigstar$	2.12	Exhaust Hood Demand Controlled Ventilation	218	936,077	21,772	A
$\bigstar$	2.13	Low-Flow Pre-Rinse Spray Valves Direct Insta	1,328	0	48,395	
	2.14	Rack Oven	104	0	218,816	
	2.15	Finned-Bottom Stock Pot				
*	2.16	Reach in RefFreezer	6,004	5,052,745	0	
	2.17	Commercial Pressure Fryer				
*	2.18	Com High Density Universal Holding Cabinets				
Gra	nd Tot		1,594,703	1,399,584	4.988.132	

**Food Services** 

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				Total	Total
			Units	Energy	Energy
Ref	No	Name	Installed	(kWh/yr)	(therm/yr)
	2.01	Commercial Convection Oven	716	65,206	232,905
	2.02	Commercial Dishwashers	1,037	0	34,221
*	2.03	Commercial Combination Oven	244	1 279 694	145 140
<b>†</b> i	2.04	Commercial Griddles	162	33,050	17,258
$\star$	2.05	Commercial Steamers	37	373,932	66,727
$\bigstar$	2.06	Commercial Ice Machines	408	479,875	0
*	2.07	Insulated Hot Food Holding Cabinets	354	752,758	0
$\star$	2.08	Commercial Conveyor Oven-Gas	14	0	12,376
*	2.09	Commercial Electric Deck Oven			
*	2.10	Commercial Hand Wrap Machines			
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★	2.13	Low-Flow Pre-Rinse Spray Valves Direct Insta	1,328	0	48,395
	2.14	Rack Oven	104	0	218,816
	2.15	Finned-Bottom Stock Pot			
*	2.16	Reach in RefFreezer	6,004	5,052,745	0
,	2.17	Commercial Pressure Fryer			
$\star$	2.18	Com High Density Universal Holding Cabinets			
Gra	nd Tot	al	1,594,703	1,399,584	4,988,132



**Food Services** 

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11

				Total	Total
			Units	Energy	Energy
Refl	No	Name	Installed	(kWh/yr)	(therm/yr)
*	2.01	Commercial Convection Oven	716	65,206	232,905
*	2.02	Commercial Dishwashers	1,037	0	34,221
*	2.03	Commercial Combination Oven	244	<b>1,</b> 279,694	145,140
*_	2.04	Commercial Griddles	162	33.050	17.258
<b>*</b>		Commercial Steamers	37	373,932	66,727
	2.06	Commercial Ice Machines	408	479,875	0
*	2.07	Insulated Hot Food Holding Cabinets	354	752,758	0
<b>A</b>	2.08	Commercial Conveyor Oven-Gas	14	0	12,376
*	2.09	Commercial Electric Deck Oven			
Ŕ.	2.10	Commercial Hand Wrap Machines			
A	2.11	Gas & Electric Fryers	2,288	18,747	1,535,209
*	2.12	Exhaust Hood Demand Controlled Ventilation	218	936,077	21,772
★	2.13	Low-Flow Pre-Rinse Spray Valves Direct Insta	1,328	0	48,395
	2.14	Rack Oven	104	0	218,816
	2.15	Finned-Bottom Stock Pot			
★	2.16	Reach in RefFreezer	6,004	5,052,745	0
	2.17	Commercial Pressure Fryer			
★	2.18	Com High Density Universal Holding Cabinets			



Grand Total

\* Images are the courtesy of PG&E Food Service Technology Center and Fisher Nickel

1,594,703 1,399,584 4,988,132

**Food Services** 

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Ref	No	Name	Units Installed	Total Energy (kWh/yr)	Total Energy (therm/yr)
$\star$	2.01	Commercial Convection Oven	716	65,206	232,905
$\star$	2.02	Commercial Dishwashers	1,037	0	34,221
$\star$	2.03	Commercial Combination Oven	244	1,279,694	145,140
$\star$	2.04	Commercial Griddles	162	33,050	17,258
*-	2.05	Commercial Steamers	37	373 932	66 727
	2.06	Commercial Ice Machines	408	479,875	0
*	2.07	Insulated Hot Food Holding Cabinets	354	752,758	0
$\star$	2.08	Commercial Conveyor Oven-Gas	14	0	12,376
$\star$	2.09	Commercial Electric Deck Oven			
$\star$	2.10	Commercial Hand Wrap Machines			
$\star$	2.11	Gas & Electric Fryers	2,288	18,747	1,535,209
$\star$	2.12	Exhaust Hood Demand Controlled Ventilation	218	936,077	21,772
$\star$	2.13	Low-Flow Pre-Rinse Spray Valves Direct Insta	1,328	0	48,395
	2.14	Rack Oven	104	0	218,816
	2.15	Finned-Bottom Stock Pot			
★	2.16	Reach in RefFreezer	6,004	5,052,745	0
	2.17	Commercial Pressure Fryer			
$\star$	2.18	Com High Density Universal Holding Cabinets			
Gran	nd Tot	al	1,594,703	1,399,584	4,988,132



Food Services (Images are exa

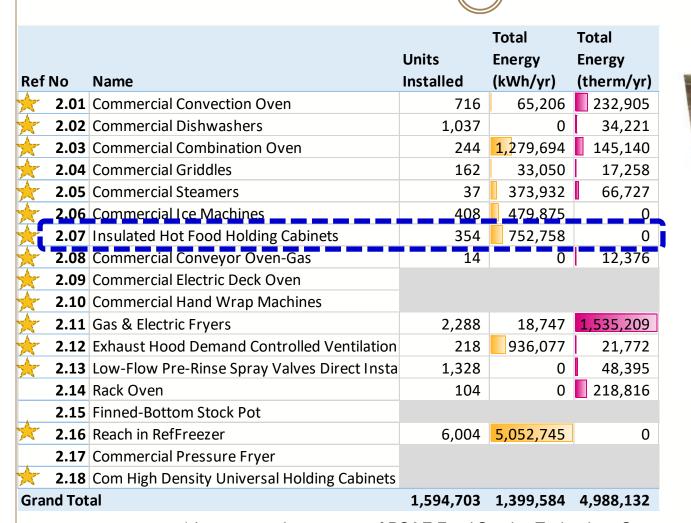
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**Food Services** 

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14

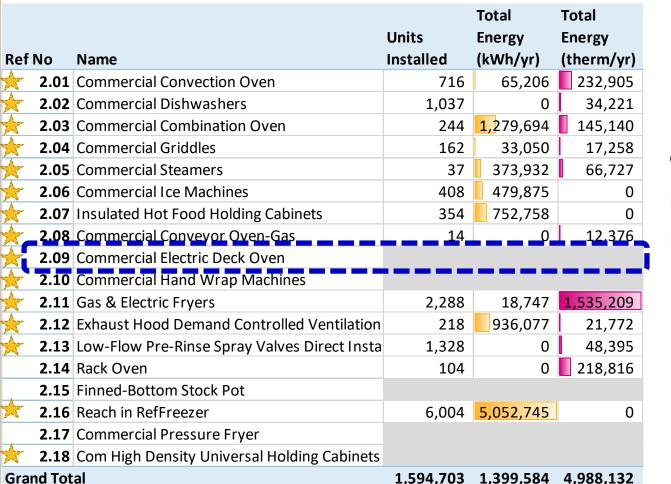
				Total	Total	
			Units	Energy	Energy	
Ref	No	Name	Installed	(kWh/yr)	(therm/yr)	
$\star$	2.01	Commercial Convection Oven	716	65,206	232,905	
$\bigstar$	2.02	Commercial Dishwashers	1,037	0	34,221	
$\bigstar$	2.03	Commercial Combination Oven	244	1,279,694	145,140	
$\star$	2.04	Commercial Griddles	162	33,050	17,258	
$\star$	2.05	Commercial Steamers	37	373,932	66,727	
$\mathbf{\star}$	2.06	Commercial Ice Machines	408	479,875	0	
$\star$	2.07	Insulated Hot Food Holding Cabinets	354	752,758	0	XLT X3F 3240 Conveyor Oven
	2.08	Commercial Conveyor Oven-Gas	14	0	12,376	ALT ASF 3240 CONVEYOR OVEN
$\bigstar$	2.09	Commercial Electric Deck Oven				
$\bigstar$	2.10	Commercial Hand Wrap Machines				
$\bigstar$	2.11	Gas & Electric Fryers	2,288	18,747	1,535,209	
$\bigstar$	2.12	Exhaust Hood Demand Controlled Ventilation	218	936,077	21,772	
$\bigstar$	2.13	Low-Flow Pre-Rinse Spray Valves Direct Insta	1,328	0	48,395	
	2.14	Rack Oven	104	0	218,816	
,	2.15	Finned-Bottom Stock Pot				
×	2.16	Reach in RefFreezer	6,004	5,052,745	0	
	2.17	Commercial Pressure Fryer				
$\star$	2.18	Com High Density Universal Holding Cabinets				
Gra	nd Tot	al	1,594,703	1,399,584	4,988,132	

Food Services

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Ref No			Energy	Energy
	Name	Installed	(kWh/yr)	(therm/yr)
🔶 2.0	1 Commercial Convection Oven	716	65,206	232,905
🔶 2.0	2 Commercial Dishwashers	1,037	0	34,221
🔶 2.0	3 Commercial Combination Oven	244	1,279,694	145,140
🔶 2.0	4 Commercial Griddles	162	33,050	17,258
🔶 2.0	5 Commercial Steamers	37	373,932	66,727
🔶 2.0	6 Commercial Ice Machines	408	479,875	0
🔶 2.0	7 Insulated Hot Food Holding Cabinets	354	752,758	0
🔶 2.0	8 Commercial Conveyor Oven-Gas	14	0	12,376
2.0	9 Commercial Electric Deck Oven			
2.1	0 Commercial Hand Wrap Machines			
2.1	1 Gas & Electric Fryers	2,288	18,747	<b>1,535,20</b> 9
📌 2.1	2 Exhaust Hood Demand Controlled Ventilation	218	936,077	21,772
🔶 2.1	<b>3</b> Low-Flow Pre-Rinse Spray Valves Direct Insta	1,328	0	48,395
2.1	4 Rack Oven	104	0	218,816
2.1	5 Finned-Bottom Stock Pot			
📩 2.1	6 Reach in RefFreezer	6,004	5,052,745	0
2.1	7 Commercial Pressure Fryer			
🌟 2.1	8 Com High Density Universal Holding Cabinets			
Grand T	otal	1,594,703	1,399,584	4,988,132



**Food Services** 

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			Total	Total
<b>6</b> • •		Units	Energy	Energy
ef No	Name	Installed	(kWh/yr)	(therm/yr)
<b>č</b> 2.01	Commercial Convection Oven	716	65,206	232,905
7 2.02	Commercial Dishwashers	1,037	0	34,221
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2.15	Finned-Bottom Stock Pot			
2.16	Reach in RefFreezer	6,004	5,052,745	0
2.17 Commercial Pressure Fryer				
2.18	Com High Density Universal Holding Cabinets			
rand Tota	al	1,594,703	1,399,584	4,988,132
2.16 2.17 2.18	Reach in RefFreezer Commercial Pressure Fryer Com High Density Universal Holding Cabinets	1,594,703	1,399,584	



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			Total	Total
		Units	Energy	Energy
No	Name	Installed	(kWh/yr)	(therm/yr)
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2.17	Commercial Pressure Fryer			
2.18	Com High Density Universal Holding Cabinets			
d Tot	al	1,594,703	1,399,584	4,988,132
	2.01 2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09 2.10 2.11 2.12 2.13 2.14 2.15 2.16 2.17 2.18	<ul> <li>2.01 Commercial Convection Oven</li> <li>2.02 Commercial Dishwashers</li> <li>2.03 Commercial Combination Oven</li> <li>2.04 Commercial Griddles</li> <li>2.05 Commercial Steamers</li> <li>2.06 Commercial Ice Machines</li> <li>2.07 Insulated Hot Food Holding Cabinets</li> <li>2.08 Commercial Conveyor Oven-Gas</li> <li>2.09 Commercial Electric Deck Oven</li> <li>2.10 Commercial Hand Wrap Machines</li> <li>2.11 Gas &amp; Electric Fryers</li> <li>2.12 Exhaust Hood Demand Controlled Ventilation</li> </ul>	NomeInstalled2.01Commercial Convection Oven7162.02Commercial Dishwashers1,0372.03Commercial Combination Oven2442.04Commercial Griddles1622.05Commercial Steamers3772.06Commercial Steamers3542.07Insulated Hot Food Holding Cabinets3542.08Commercial Electric Deck Oven142.09Commercial Hand Wrap Machines2.2882.11Gas & Electric Fryers2.2882.12Exhaust Hood Demand Controlled Ventilation1,3282.13Iow-Flow Pre-Rinse Spray Valves Direct Insta1,3282.14Rack Oven1042.15Finned-Bottom Stock Pot6,0042.16Reach in RefFreezer6,0042.17Commercial Pressure Fryer6,0042.18Com High Density Universal Holding Cabinets6,004	NoNameUnitsEnergy (kWh/yr)2.01Commercial Convection Oven71665,2062.02Commercial Dishwashers1,03702.03Commercial Combination Oven2441,279,6942.04Commercial Griddles16233,0502.05Commercial Steamers377373,9322.06Commercial Ice Machines408479,8752.07Insulated Hot Food Holding Cabinets354752,7582.08Commercial Conveyor Oven-Gas11402.09Commercial Electric Deck Oven2,28818,7472.10Commercial Hand Wrap Machines2,28818,7472.11Gas & Electric Fryers2,28818,7472.12Exhaust Hood Demand Controlled Ventilation1,32802.13Iow-Flow Pre-Rinse Spray Valves Direct Insta1,32802.14Rack Oven10402.15Finned-Bottom Stock Pot102.16Reach in RefFreezer6,0045,052,7452.17Commercial Pressure Fryer6,0045,052,7452.18Com High Density Universal Holding Cabinets11



\* Images are the courtesy of PG&E Food Service Technology Center and Fisher Nickel

Food Services

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				Total	Total	
			Units	Energy	Energy	
Ref	No	Name	Installed	(kWh/yr)	(therm/yr)	
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	2.08	Commercial Conveyor Oven-Gas	14	0	) 12,376	
	2.09	Commercial Electric Deck Oven				
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	2.17	Commercial Pressure Fryer				
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Gra	Grand Total		1,594,703	1,399,584	4,988,132	



Food Services

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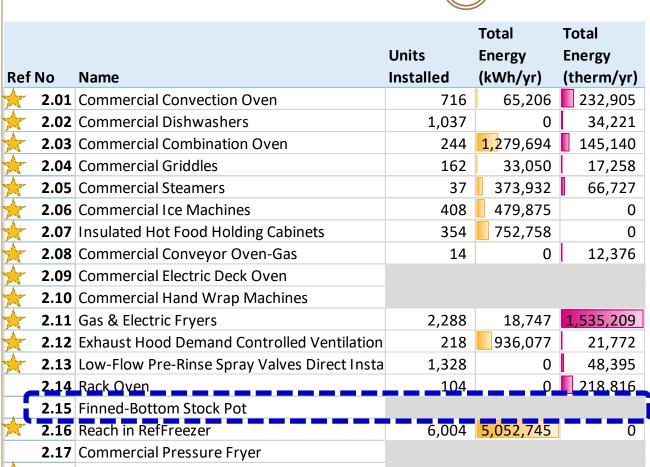


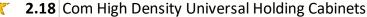
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			Total	Total			
		Units	Energy	Energy			
Ref No	Name	Installed	(kWh/yr)	(therm/yr)			
7 2.01	Commercial Convection Oven	716	65,206	232,905			
2.02	Commercial Dishwashers	1,037	0	34,221	-		
2.03	Commercial Combination Oven	244	<b>1,</b> 279,694	145,140			Š
2.04	Commercial Griddles	162	33,050	17,258		0	
2.05	Commercial Steamers	37	373,932	66,727			
2.06	Commercial Ice Machines	408	479,875	0	-		
2.07	Insulated Hot Food Holding Cabinets	354	752,758	0	And the second s		
2.08	Commercial Conveyor Oven-Gas	14	0	12,376	T	0	
2.09	Commercial Electric Deck Oven						
2.10	Commercial Hand Wrap Machines						
2.11	Gas & Electric Fryers	2,288	18,747	1,535,209			martin
2.12	Exhaust Hood Demand Controlled Ventilation	218	936,077	21,772			
2.13	Low-Flow Pre-Rinse Spray Valves Direct Insta	1,328	0	48,395			
2.14	Rack Oven	104	0	218,816	i		
2.15	Finned-Bottom Stock Pot						
2.16	Reach in RefFreezer	6,004	<mark>5,052,745</mark>	0			
2.17	Commercial Pressure Fryer						
7 2.18	Com High Density Universal Holding Cabinets						
rand Tot	tal	1,594,703	1,399,584	4,988,132			
	* Images are the courtesy of P	G&E Food S	ervice Te <u>ch</u> ı	nology Cente	er and Fisher Nick	el	
Food S	Services (Images are examples of techr						/1/2







**Grand Total** 

1,594,703 1,399,584 4,988,132

Food Services

\* Images are the courtesy of PG&E Food Service Technology Center and Fisher Nickel (Images are examples of technology, but not intended as a product endorsement.)









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**Food Services** 

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$\mathbf{A}$	2.08	Commercial Conveyor Oven-Gas	14	0	12,376
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$\star$	2.18	Com High Density Universal Holding Cabinets			
Gra	Grand Total		1,594,703	1,399,584	4,988,132

**Question:** Should Commercial Reach-In Refrigerators / Freezers be included in this category or in Appliance / Plug Loads? Thoughts?

**Food Services** 

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## **Cross-Cutting Issues**

- Disposition to de-rate savings by 30% requires supporting documentation of inputs.
- EULs are referenced almost exclusively to DEER, which is 12 years for most equipment.
  - □ EUL may very significant across markets (restaurants vs schools).
- Peak times are changing. How does this effect the standard 0.9 CDF (coincident diversity factor) that is applied to this category?
- Water savings measures are captured (currently) when linked to hot water savings.

Cross-Cutting Issues Existing Dispositions



- 30% Reduction of Savings
  - D-11-07-030, Attachment A-B, "Summary of final determinations of Non-DEER Ex Ante Energy Savings values for High Impact energy efficiency measures for Utility 2010-2012 Portfolios." (7/14/11)

· · · ·		
PGE PGECOFST101	Approval upon inclusion of the following rev	visions:
Convection Oven	1. Energy Division believes that operatin	g hours, food
SCG SCGWP080331B	production rates and baseline efficient	ncies contribute
Conveyor Oven	to overly optimistic UES calculations a	nd recommend a
PGE PGECOFST102	30% reduction in UES values for this gr	oup of measures.
Fryer - Electric and Gas		
PGE PGECOFST104		
Steam Cookers		

- Same decision from 2011 is starting to impact new measures that are under review by Ex Ante Team.
- Some ET/PIER studies coming to help solve 30% issue for:
   Convection Oven, Griddle, Fryer, Broiler, Combination Oven

# Measure Specific Issue – Combi-Oven Methodologies Match / Assumptions Differ



	SCE		PG&E			
	15-28 Pc	an Capacity	15-28 Pan Capacity			
Performance	Baseline Model	Energy-Efficient Model	Baseline Model	Energy-Efficient Model		
Preheat Time (min)	15	15	15	15		
Preheat Energy (kWh)	3.75	2	3.75	2		
Convection Idle Energy Rate (kW)	3.75	2.5	3.75	2.5		
Convection Cooking Energy Efficiency (%)	65%	70%	65%	70%		
Convection Production Capacity (lbs/hr)	100	125	100	125		
Steam Idle Energy Rate (kW)	12.5	6	12.5	6		
Steam Cooking Energy Efficiency (%)	40%	50%	40%	50%		
Steam Production Capacity (lbs/hr)	150	200	150	200		
Average Water Consumption Rate (gal/h)	40	25	40	25		
Operating Hours/Day	12	12	12	12		
Operating Days/Year	355	355	365	365		
Number of Preheats per Day	1	1	1	1		
Pounds of Food Cooked per Day	250	250	250	250		
Percentage Time in Steam Mode	50%	50%	50%	50%		
ASTM Convection Mode Energy to Food (kWh/lb)	0.0732					
ASTM Steam Mode Energy to Food (kWh/lb)	0.0308					

#### Assumptions vary slightly between IOUs

#### Measure Specific Issue – Pre-Rinse Spray Methodologies Match / Assumptions Differ

29



				J				
PG&E								
	gpm	Hours/Day	Days/yr	Mix H <sub>2</sub> O °F	Supply H <sub>2</sub> 0 °F	Water heater efficiency	Therms/yr	Savings Therms/yr
Baseline	1.4	1	365	114.1	63.2	0.7	185.7	-
Qualifying Measure	1.15	1	365	114.1	63.2	0.7	152.5	33.2
SCG								
	GPM	Hours/Day	Days/yr	Mix H <sub>2</sub> O °F	Supply H <sub>2</sub> 0 °F	eff	Therms/yr	Savings Therms/yr
Baseline	1.6	0.964	365	114.1	68	0.7	185.3	N/A
Qualifying Measure	1.28	1.007	365	114.1	68	0.7	154.9	30.4
SDG&E								
CZ06	GPM	Hours/Day	Days/yr	Mix H <sub>2</sub> O °F	SDG&E Supply H₂0 °F	SDG&E Savings Therm		rms/yr
Base, Pre-Rinse Spray Valve	1.6	1	365	114.1	61.7	0.7	218.5	
Low Flow Pre-Rinse Spray Valve, 1.07 GPM	1.07	1	365	114.1	61.7	0.7	146.1	72.4
Low Flow Pre-Rinse Spray Valve, 1.28 GPM	1.28	1	365	114.1	61.7	0.7	174.8	43.7
Low Flow Pre-Rinse Spray Valve, 1.15 GPM	1.15	1	365	114.1	61.7	0.7	157.0	61.5



### **Measure Specific Issues**

30

- Need consensus on calculation assumptions for:
  - Combination Oven
  - Griddle
  - Gas / Electric Fryers
  - Steamer
  - Ice Machines
  - Insulating Holding Cabinet
  - Exhaust Hood Demand Controlled Ventilation (DCV)
  - Pre-Rinse Spray Valves
- Changing Measures:
  - New: Under-counter Dishwasher (POUs have additional offerings)
  - Code: Commercial Ice Machines (Energy Star version 3)



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**Food Services** 

