APPENDIX B

RATE DESIGN

SCHEDULING, SYSTEM CONTROL, AND DISPATCH SERVICE RATE

SCHEDULING, SYSTEM CONTROL, AND DISPATCH SERVICE RATE

PROPOSED RATE CALCULATION FOR FY 2012

	Revenue Requirement		Schedule Count		Maximum Cost per Schedule
1-Oct-11	$ 5,481,314	/	208,288	=	$ 26.32

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PROPOSED FY 2012 RATE CALCULATION												
		J4800 Staff							G6300 Staff		G6100 Staff	
	Total	PS -1	PS-2	RT-Supervisor	Scheduling Supvr	Technical Leads	RT Sched 1	RT Sched 2	Post-Schedulers-G6300	G6300 Support	Rates Mgr	Rates PUS
Hourly Pay (loaded)		$ 99.58	$ 99.58	$ 99.58	$ 99.58	$ 99.58	$ 99.58	$ 99.58	$88.87	$88.87	$85.69	$85.69
Hours/Yr		1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Annual Pay (loaded)	$1,830,815	$ 174,265	$ 174,265	$ 174,265	$ 174,265	$ 174,265	$ 174,265	$ 174,265	$ 155,523	$ 155,523	$ 149,958	$ 149,958
% of staff time captured in SSCD Rate		90%	80%	25%	46%	10%	100%	70%	25%	20%	2%	2%
FTE Captured in the SSCD Rate	13.5	1	1	1	0.5	2	1	1	3	1	1	1
Total Labor Costs captured to SSCD Rate	$ 809,639	$ 156,839	$ 139,412	$ 43,566	$ 80,162	$ 17,427	$ 174,265	$ 121,986	$ 38,881	$ 31,105	$ 2,999	$ 2,999
Total Annual Capital Costs	$ 4,671,675											
Total Revenue Requirement	$ 5,481,314											

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CALCULATION CAPITAL COSTS
FOR FY 2012
Plant Costs of Phoenix Service Building
(SCADA and Dispatch Center)

SCADA Cost	Work Order No.	Cumulative Balances Replacement Investment 32 Years	Cumulative Balances Addition Investment 50 Years	IDC %	Annual Capital Cost Replacement	Annual Capital Cost Addition	Total Annual Capital Cost	Description
	PHS 0026C		$14,825,860	8.750%		1,317,131		FY99 Retirement Project-PHS 0037K, Phase 2 of construction of Phx Ops Center
	PHS 0028C	$ 17,688,266		8.875%	$ 1,680,456			Scada System: Replace Scada System, Indicating Equpment
	PHS 0054B		$ 253,433	6.875%		$ 18,074		Scada System Hardware
	PHS 0058B		$ 139,005	5.750%		8,676		PHS Scada Hardware and Software
	PHS 0060B	$ 639,244		5.750%	44,132			Scada Software Replacement
	PHS 0066B	$ 125,629		6.250%	$ 9,170			Scada hardware upgrade in FY01
	PHS 0067B		$ 692,019	6.250%		45,444		PHS Scada system software
	PHS 0073B		$ 172,088	5.625%		10,351		upgrades for FY02 Scada
	PHS 0074B		$ 236,648	5.625%		14,234		Scada System Hardware - Acquire and install
	PHS 0076B		$ 152,199	5.500%		8,989		Acquire and install Ops LAN Hardware and Software in FY03
	PHS 0077B	$ 220,302		5.500%	14,781			Acquire and install Scada system hardware in FY03
	PHS 0078B	$605,804		4.875%	37,767			Acquire and install Scada system software in FY03
	PHS 0081B	$ 100,382		5.500%	6,735			Build security fence within Scada computer room to meet IG Audit Finding
	PHS 0083B	$ 354,622		4.875%	22,108			Replace 7 Barco 6500 Reality Projectors w/G200L Projectors
	PHS 0091B	$ 216,209		5.125%	13,886			Upgrading Older GE-Harris D20 RTU's to the latest software - Scada Comm Equipment
	PHS 0101B	$ 127,398		4.625%	7,705			Upgrade old Channel bank equipment with new RFL - Scada Comm Equipment
	PHS 0102B	$ 590,071		4.625%	35,689			Acquire and Install Scada System Hardware in FY06 - Scada Comm Equipment
	PHS 0108B	$1,856,507		4.000%	103,869			Acquire and Install Scada System Software in FY06 - Scada Comm Equipment
Annual Capital Cost for SCADA		$ 22,524,434	$ 16,471,252		$ 1,976,299	$ 1,422,899	$ 3,399,198	
Dispatch Center								
	PHS 0023C	$ 6,481,884	$ 6,321,278	8.875%	$ 615,805	$ 568,506		Dispatch Center: Shop, Fences, Chargers, Microwave, Telephone Sys, Indicating Equp.
	PHS 0053C		$ 589,304	6.875%		$ 42,027		Add alternate dipatch center
	PHS 0061B		$ 602,607	5.750%		$ 37,611		Closed Replacement of Dispatch Center Mapboard
	PHS 0068B	$ 73,625		6.250%	$ 5,374			GE-Harris D20 RTU's Upgrade
	PHS 0094B		$56,501	5.125%		$ 3,155		Remodel and reconfiguration of G4000
Annual Capital Cost for Dispatch Center		$ 6,555,509	$ 7,569,690		$ 621,179	$ 651,299	$ 1,272,478	
Total Annual Capital Cost							$ 4,671,675	

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APPENDIX B

RATE DESIGN

REACTIVE SUPPLY AND VOLTAGE CONTROL SERVICE

REACTIVE SUPPLY AND VOLTAGE SUPPORT RATES

Proposed Rate Calculation for FY 2012

Rate = Revenue Requirement for Service/Transmission Reservations Requiring Service

(The revenue requirement for the service is the sum of the service for each generation project in WALC determined by multiplying the generation revenue requirement by one minus the power factor for the supplying plants. WALC Transmission Reservations are the total firm point-to-point reservations minus reservations by entities with generation agreements to supply Voltage Support Service to WALC.)

	BCP	PDP	CRSP	Total
Gen RR	$75,182,522	$12,084,382	$26,301,209	
(1-Power Factor	0.025	0.032	0.025	
RR for Service	$ 1,879,563.05	$ 386,700.22	$ 657,530.23	$ 2,923,793.50
	64.29%	13.23%	22.49%	100.00%
	64%	13%	22%	100.00%

DSW non-IPP	PDP	CRSP	
Trans Capacity (kW)	2,718,323	1,466,661	4,184,984
Rate ($/kW-Yr)			$0.70
($/kW-Month)			$0.058

Rate ($/kW-Yr)	$0.70
($/kW-Month)	$0.058
($/kW-Week)	$0.013
($/kW-Day)	$0.0019
(mills/kWh)	0.0798

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APPENDIX B

RATE DESIGN

REGULATION AND FREQUENCY RESPONSE SERVICE

Regulation & Frequency Response Service
Proposed Rate Calculation for FY 2012

Hoover Revenue Requirement

Hoover Capacity	=	52	MW
Hoover Capacity Rate	=	1.76	$/kW-Mo
Annual Hoover Revenue Requirement	=	$1,089,896	

Regulation Purchases (including purchases to support Regulation)

Purchases (to be determined)

CRSP Revenue Requirement

CRSP Capacity Required	=	20	MW
CRSP Capacity Rate	= $	2.18	$/kW-Mo
CRSP Revenue Requirement	=	$522,658	
Total Annual Revenue Requirement (ARR)	=		$1,612,554

Rate Calculation

Rate = ARR / Control Area Load for Regulation

Control Area Load for Regulation	=	816,368	kW
		Capacity Based Rate	
Regulation Rate	=	$1.9753	Per kW-YR
		$0.1646	Per kW-Mo
		$0.0379861	Per kW-Week
		$0.0054117	Per kW-Day
		$0.0002255	Per kWh

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APPENDIX B

RATE DESIGN

ENERGY IMBALANCE SERVICE

PROPOSED ENERGY IMBALANCE SERVICE RATE STRUCTURE

Energy Imbalance Service Class of Service	Existing Rate Schedule DSW-EI2 Effective Date 07/01/2006	Proposed Rate Schedule DSW-EI3 Effective Date 10/01/2011
On-Peak Hours	+/- 0 to 1.5%; Min: 0 to 5MW	+/- 0% to 1.5%; Min: 0 to 4MW
Energy within Bandwidth	100% return	100% return
On-Peak Hours	N/A	+/- 1.5% to 7.5%; Min: 4 to 10 MW
Under Deliveries		110% return
Over Deliveries		90% return
On-Peak Hours	N/A	>7.5%, Min: > 10 MW
Under Deliveries		125% return
Over Deliveries		75% return
Off-Peak Hours	-3% to +1.5% Min: 2MW Over Deliveries Min: 5MW Under Deliveries	-3% to ≥ 7.5%, Min: 2 MW Over Deliveries Min: 5 MW Under Deliveries
Energy within Bandwidth	100% return	100% return
Energy outside Bandwidth		
Under Deliveries	110% return	110% return
Over Deliveries	60% return	60% return

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APPENDIX B

RATE DESIGN

GENERATOR IMBALANCE SERVICE

PROPOSED GENERATOR IMBALANCE SERVICE RATE STRUCTURE

Generator Imbalance Service Class of Service	Proposed Rate Schedule DSW-GI1 Effective Date 10/01/2011
On-Peak Hours	+/- 0% to 1.5%; Min: 0 to 4MW
Energy within Bandwidth	100% return
On-Peak Hours	+/- 1.5% to 7.5%; Min: 4 to 10 MW
Under Deliveries	110% return
Over Deliveries	90% return
On-Peak Hours	>7.5%, Min: > 10 MW
Under Deliveries	125% return
Over Deliveries	75% return
Off-Peak Hours	-3% to ≥ 7.5%, Min: 2 MW Over Deliveries Min: 5 MW Under Deliveries
Energy within Bandwidth	100% return
Energy outside Bandwidth	
Under Deliveries	110% return
Over Deliveries	60% return

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