

# Alternative 4

## Schedule A

Districts Receiving '87 Allocation	Alternative 4							
Districts Not Receiving '87 Allocation	Schedule A							
Cities/Towns (Own Elec System) Receiving '87 Allocation								
Cities/Towns (Own Elec System) Not Receiving '87 Allocation								
Co-operatives								
Other Eligible								
Cities/Towns (Do Not Own Elec System)								
Military Installations								
Spreadsheet Description	Schedule A Capacity (190.869 MW)							
Alternative 4 - Aguila ID releases their Schedule B and receives the excess from ED7 and Ocotillo WCD in return. Schedule A remains status quo for the remaining entities. The remaining entities are allocated the same in 2017 with a 1% capacity increase and a 5% energy decrease.	Status Quo							
	Formula= Current MW * 1.01 Current MWh * 0.95							
	5 Yr Avg Normalized Load (MW)	Federal Resource Test Needs (MW) 2017 Maximum Allocation	1987 Allocation Schedule A Capacity (MW)	1987 Allocation Schedule A Energy (MWh)	Anticipated 2017 Schedule A Capacity (MW) Allocation	Anticipated 2017 Schedule A Energy (MWh) Allocation	Capacity INC/DEC (MW) From 1987	Energy INC/DEC (MWh) From 1987
Aguila Irrigation District	7.839	7.839	2.450	8,389	5.906	18,989.929	3.456	10,600.929
Avra Valley I&DD	1.822	1.822	0.630	2,168	0.636	2,045.632	0.006	(122.368)
Buckeye WC District	7.949	7.949	2.980	10,201	3.009	9,676.165	0.029	(524.835)
Central Arizona Water Conservation & Drainage District			-	-	-	-	-	-
Chandler Heights ID	1.562	1.190	0.930	3,164	0.939	3,019.743	0.009	(144.257)
Cortaro Marana ID	7.191	7.191	6.440	22,003	6.504	20,910.907	0.064	(1,092.093)
ED 2	63.540	54.154	19.450	66,473	19.642	63,154.837	0.192	(3,318.163)
ED 3 Pinal (inc ED1)	218.046	204.855	15.900	54,351	16.057	51,627.862	0.157	(2,723.138)
ED 4 Pinal	56.024	51.470	19.450	66,473	19.642	63,154.837	0.192	(3,318.163)
ED 5 Pinal	27.308	24.566	14.770	50,476	14.916	47,958.712	0.146	(2,517.288)
ED 6 Pinal (Inc ED5 M)	36.320	29.327	8.360	28,579	8.443	27,145.215	0.083	(1,433.785)
ED 7 Maricopa	12.344	7.873	10.500	35,902	7.873	25,313.558	-2.627	(10,588.442)
ED 8 Maricopa	67.467	67.467	13.390	45,749	13.522	43,477.803	0.132	(2,271.197)
Harquahala Valley Power Dist	27.691	27.691	2.490	8,495	2.515	8,085.118	0.025	(409.882)
Maricopa Co. Mun. WCD	23.202	17.856	8.840	30,215	8.927	28,703.792	0.087	(1,511.208)
McMullen Valley WCDD	17.761	17.761	3.800	12,974	3.838	12,338.734	0.038	(635.266)
Ocotillo WCD	2.793	1.712	2.390	8,175	1.712	5,504.485	-0.678	(2,670.515)
Queen Creek ID	11.901	10.146	1.770	6,043	1.788	5,747.253	0.018	(295.747)
Roosevelt ID	17.577	12.701	3.220	11,020	3.252	10,455.454	0.032	(564.546)
Roosevelt WCD	18.401	16.202	6.760	23,106	6.827	21,949.959	0.067	(1,156.041)
Salt River Project	6663.000	6535.519	38.790	132,589	39.174	125,953.375	0.384	(6,635.625)
San Tan ID	2.158	1.338	0.520	1,777	0.525	1,688.458	0.005	(88.542)
Silverbell I&DD	1.257	1.257	0.710	2,417	0.717	2,305.395	0.007	(111.605)
Tonopah Irrigation District	10.077	10.077	1.550	5,297	1.565	5,032.905	0.015	(264.095)
Wellton-Mohawk ID	14.870	11.655	2.910	9,953	2.939	9,448.873	0.029	(504.127)

189.000      645,989      190.869      613,689

# Alternative 4

## Schedule B

Spreadsheet Description	Schedule B Capacity (189.860 MW)								
	Status Quo								
	Formula Districts= Current MW * 1.01 for capacity, 2017 MW Allocation/189.86 * 201,400 for energy. Formula Cities= Federal Resource Test Needs/Total Need * 3.88 + 1987 allocation * 1.01 for Capacity, 2017 MW Allocation/189.86 * 201,400 for Energy.								
	5 Yr Avg Normalized Load (MW)	Federal Resource Test Needs (MW) 2017 Maximum Allocation	Percentage of Overall Need	1987 Allocation Schedule B Capacity (MW)	1987 Allocation Schedule B Energy (MWh)	Anticipated 2017 Schedule B Capacity (MW) Allocation	Anticipated 2017 Schedule B Energy (MWh) Allocation	Capacity INC/DEC (MW) From 1987	Energy INC/DEC (MWh) From 1987
Aguila Irrigation District				3.84	4,327	-	-	(3.840)	(4,327.000)
Avra Valley I&DD				-	-	-	-	-	-
Buckeye WC District				-	-	-	-	-	-
Central Arizona Water Conservation & Drainage District		484.545		161.60	182,235	163.198	173,117.849	1.598	(9,117.151)
Chandler Heights ID				-	-	-	-	-	-
Cortaro Marana ID				-	-	-	-	-	-
ED 2				-	-	-	-	-	-
ED 3 Pinal (inc ED1)				-	-	-	-	-	-
ED 4 Pinal				-	-	-	-	-	-
ED 5 Pinal				-	-	-	-	-	-
ED 6 Pinal (Inc ED5 M)				-	-	-	-	-	-
ED 7 Maricopa				-	-	-	-	-	-
ED 8 Maricopa	67.467	67.467		10.81	12,185	10.917	11,580.470	0.107	(604.530)
Harquahala Valley Power Dist				-	-	-	-	-	-
Maricopa Co. Mun. WCD				-	-	-	-	-	-
McMullen Valley WCDD	17.761	17.761		5.29	5,970	5.342	5,667.039	0.052	(302.961)
Ocotillo WCD				-	-	-	-	-	-
Queen Creek ID				-	-	-	-	-	-
Roosevelt ID				-	-	-	-	-	-
Roosevelt WCD				-	-	-	-	-	-
Salt River Project				-	-	-	-	-	-
San Tan ID				-	-	-	-	-	-
Silverbell I&DD				-	-	-	-	-	-
Tonopah Irrigation District				-	-	-	-	-	-
Wellton-Mohawk ID				-	-	-	-	-	-
Page - Own System & Operating	26.405	14.468	33.00%	1.04	1,173	2.331	2,472.707	1.291	1,299.707
Safford - OSO	19.797	18.656	42.55%	2.08	2,345	3.750	3,977.565	1.670	1,632.565
Thatcher - OSO	7.020	5.503	12.55%	1.05	1,185	1.547	1,641.725	0.497	456.725
Wickenburg - OSO	7.213	5.213	11.89%	2.29	2,580	2.774	2,942.646	0.484	362.646

60.435      43.840      1.000      188.000      212,000      189.860      201,400

# Alternative 4

## Schedule D2 (Bring all entities to Minimum 0.100MW)

Schedule D2 Capacity = 11.510 MW

All New Entities, No Preference

Formula= 5 Year Load Avg/Total 5 Year Load\*11.510 To determine Capacity Allocation (0.1MW Minimum Allocation), Capacity Allocation/11.510 \* 25,113(MWh) to determine Energy Allocation

Districts Receiving '87 Allocation	<p><b>Alternative 4</b></p> <p><b>Schedule D2 (Bring all entities to Minimum 0.100MW)</b></p> <p>Schedule D2 Capacity = 11.510 MW</p> <p>All New Entities, No Preference</p> <p>Formula= 5 Year Load Avg/Total 5 Year Load*11.510 To determine Capacity Allocation (0.1MW Minimum Allocation), Capacity Allocation/11.510 * 25,113(MWh) to determine Energy Allocation</p>								
Districts Not Receiving '87 Allocation									
Cities/Towns (Own Elec System) Receiving '87 Allocation									
Cities/Towns (Own Elec System) Not Receiving '87 Allocation									
Co-operatives									
Other Eligible									
Cities/Towns (Do Not Own Elec System)									
Military Installations									
Spreadsheet Description	<p>Alternative 4 - Schedule D2 is allocated at the full capacity of 11.510MW. All new entities are included. No Preference is given to the type of entity being allocated. All entities Normalized (Peak Power + Pumping Equivalent) Loads are totaled. Each entities 5 year average Normalized loads are totaled and the Federal Resources they currently receive and anticipated D1 allocations are subtracted. Each entities need is equal to a percentage of the total need. This percentage is applied to the D2 allotment of 11.510MW to determine their allotment. 15 entities do not meet the minimum allocation of 0.100MW. Entities receiving over 0.400MW have their associated capacity and energy reallocated to the 15 entities to bring their allocations above the minimum. The entities that have capacity and energy reallocated are reduced by 0.15MW each.</p>								
5 Yr Avg Normalized Load (MW)	Federal Resource Test Needs (MW) 2017 Maximum Allocation	% of Total Needs	2017 Schedule D1 Capacity Allocation (MW)	2017 Schedule D1 Energy Allocation (MWh)	Anticipated 2017 Schedule D2 Capacity (MW)	Anticipated 2017 Schedule D2 Energy (MWh)	Group Totals MW	Group Totals (MWh)	
Hohokam IDD	1.500	0.500	0.06%		0.100	218.184	0.500	1,090.921	
Markham Irrigation District	0.220	0.220	0.03%		0.100	218.184			
Franklin Irrigation District	0.567	0.567	0.07%		0.100	218.184			
Silver Creek Irrigation District	0.468	0.468	0.05%		0.100	218.184			
Gila Valley Irrigation District	2.493	2.493	0.29%		0.100	218.184			
Fredonia OSO	2.684	0.684	0.08%		0.100	218.184	0.955	2,082.850	
Mesa (inc AzPPA share)	83.110	68.419	7.86%		0.755	1,646.481			
Williams	8.169	7.169	0.82%		0.100	218.184			
Avra Water Cooperative	0.563	0.563	0.06%		0.100	218.184	8.390	18,306.600	
Duncan Valley EC	7.354	7.354	0.84%		0.100	218.184			
Graham County EC	43.543	43.231	4.97%	0.312	681.163	0.422			919.861
Mohave EC	199.257	198.112	22.76%	1.145	2,499.781	2.469			5,387.866
Navopache EC	80.339	72.451	8.32%	0.888	1,938.695	0.808			1,762.797
Sulphur Springs EC	199.243	196.512	22.57%	2.731	5,962.361	2.448			5,341.709
TRICO EC	168.878	165.878	19.05%	3.000	6,549.646	2.043			4,457.999
Chandler - City	13.478	12.802	1.47%	0.676	1,475.854	0.169	369.825	1.465	3,196.260
Gilbert	3.470	2.470	0.28%			0.100	218.184		
Glendale - City	14.996	14.570	1.67%	0.426	930.050	0.193	420.317		
Peoria - Town	14.107	13.416	1.54%	0.691	1,508.602	0.177	387.016		
Scottsdale - City	34.697	32.331	3.71%	2.366	5,165.487	0.277	605.406		
Tempe - City	5.943	5.702	0.66%	0.241	526.155	0.100	218.184		
Tucson - City	20.000	18.752	2.15%	1.248	2,724.653	0.248	540.959		
Oro Valley - Town	2.796	2.796	0.32%			0.100	218.184		
Page Water Utility	0.750	0.750	0.09%			0.100	218.184		
Hualapai Tribe	3.000	1.994	0.23%	0.381	831.805	0.100	218.184		
Metropolitan Domestic Water ID	0.500	0.321	0.04%	0.179	390.796	0.100	218.184		

912.125      870.525      1.000      14.284      31,185.048      11.510      25,113.000      11.510      25,113.000

**Total MW Needed to Bring All Entities to the Minimum Allocation of 0.1MW = 1.051**

Districts Receiving '87 Allocation	<h1 style="margin: 0;">Alternative 4</h1> <h2 style="margin: 0;">Schedule D2 (All entities not meeting minimum allocation 0.100MW removed)</h2>
Districts Not Receiving '87 Allocation	
Cities/Towns (Own Elec System) Receiving '87 Allocation	
Cities/Towns (Own Elec System) Not Receiving '87 Allocation	
Co-operatives	
Other Eligible	
Cities/Towns (Do Not Own Elec System)	
Military Installations	

<b>Spreadsheet Description</b>	<b>Schedule D2 Capacity = 11.510 MW</b>
	All New Entities, No Preference

<p>Alternative 4 - Schedule D2 is allocated at the full capacity of 11.510MW. All new entities are included. No Preference is given to the type of entity being allocated. All entities Normalized (Peak Power + Pumping Equivalent) Loads are totaled. Each entities 5 year average Normalized loads are totaled and the Federal Resources they currently receive and anticipated D1 allocations are subtracted. Each entities need is equal to a percentage of the total need. This percentage is applied to the D2 allotment of 11.510MW to determine their allotment. Entities not meeting 0.100MW allotment are removed. Remaining entities are retabled, percentages determined, and allocated.</p>	<p>Formula= 5 Year Load Avg/Total 5 Year Load*11.510 To determine Capacity Allocation (0.1MW Minimum Allocation), Capacity Allocation/11.510 * 25,113(MWh) to determine Energy Allocation</p>
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	5 Yr Avg Normalized Load (MW)	Federal Resource Test Needs (MW) 2017 Maximum Allocation	% of Total Needs	2017 Schedule D1 Capacity Allocation (MW)	2017 Schedule D1 Energy Allocation (MWh)	Anticipated 2017 Schedule D2 Capacity (MW)	Anticipated 2017 Schedule D2 Energy (MWh)	Group Totals MW	Group Totals (MWh)
Hohokam IDD									
Markham Irrigation District									
Franklin Irrigation District									
Silver Creek Irrigation District									
Gila Valley Irrigation District									
Fredonia OSO									
Mesa (inc AzPPA share)	83.110	68.419	8.18%			0.941	2,054.108	0.941	2,054.108
Williams									
Avra Water Cooperative									
Duncan Valley EC									
Graham County EC	43.543	43.231	5.17%	0.312	681.163	0.595	1,297.908		
Mohave EC	199.257	198.112	23.68%	1.145	2,499.781	2.726	5,947.801	9.304	20,300.713
Navapache EC	80.339	72.451	8.66%	0.888	1,938.695	0.997	2,175.159		
Sulphur Springs EC	199.243	196.512	23.49%	2.731	5,962.361	2.704	5,899.765		
TRICO EC	168.878	165.878	19.83%	3.000	6,549.646	2.283	4,980.081		
Chandler - City	13.478	12.802	1.53%	0.676	1,475.854	0.176	384.348		
Gilbert									
Glendale - City	14.996	14.570	1.74%	0.426	930.050	0.200	437.428		
Peoria - Town	14.107	13.416	1.60%	0.691	1,508.602	0.185	402.772		
Scottsdale - City	34.697	32.331	3.87%	2.366	5,165.487	0.445	970.651	1.264	2,758.179
Tempe - City									
Tucson - City	20.000	18.752	2.24%	1.248	2,724.653	0.258	562.982		
Oro Valley - Town									
Page Water Utility									
Hualapai Tribe								-	-
Metropolitan Domestic Water ID								-	-
	871.647	836.473	1.000	13.483	29,436.292	11.510	25,113.000	11.510	25,113.000