

Attachment 4

Time Sheets of Matthew Vespa and
Bill Powers

Expert Hours of		Issue Codes				
Bill Powers, P.E.		1.00	Timing/Extent of Flexible Capacity Need			
		2.00	Preferred Resources			
		3.00	Hearings			
Flexible Capacity Rulemaking 11-10-023		Costs	Cost-related issues			
Date	Description	Hours	1	2	3	
9/18/2012	CPUC flexible capacity workshop participation (via telephone)	4.00			4	
9/23/2012	document review following workshop	1.00	1.00			
12/6/2012	review of CAISO flexible capacity proposal	0.50	0.50			
12/7/2012	review of CAISO flexible capacity proposal	1.00	1.00			
12/10/2012	review of CAISO net qualify capacity calculation procedure	2.00	2.00			
12/12/2012	review of CAISO afternoon solar decline rate assumptions	2.00	2.00			
12/13/2012	review of CAISO afternoon solar decline rate assumptions	4.00	4.00			
12/14/2012	write-up on proper solar profile and ramp rates for joint SC/Vote Solar comment letter	8.00	8.00			
12/17/2012	write-up on proper solar profile and ramp rates for joint SC/Vote Solar comment letter	1.50	1.50			
12/18/2012	review and editing of comment letter	5.00	5.00			
1/24/2013	review and editing of comment letter	1.50	1.50			
3/1/2013	review of CAISO PowerPoint on flexible capacity requirements	2.00	2.00			
3/4/2013	review of CAISO existing resource ramp rate assumptions	1.00	1.00			
3/6/2013	review of CAISO existing resource ramp rate assumptions	0.50	0.50			
3/8/2013	review of CAISO existing resource ramp rate assumptions	1.00	1.00			
3/17/2013	review of CAISO solar decline rate assumptions	3.00	3.00			
3/18/2013	detailed review to CAISO 12/26/12 comment letter and response to Sierra Club data request	3.00	3.00			
3/19/2013	detailed review to CAISO 12/26/12 comment letter and response to Sierra Club data request	2.50	2.50			
3/25/2013	detailed review to CAISO 12/26/12 comment letter and response to Sierra Club data request	3.00	3.00			
3/26/2013	detailed review to CAISO 12/26/12 comment	2.50	2.50			

	letter and response to Sierra Club data request						
3/27/2013	detailed review to CAISO 12/26/12 comment letter and response to Sierra Club data request	1.00	1.00				
4/1/2013	detailed review to CAISO 12/26/12 comment letter and response to Sierra Club data request	0.50	0.50				
4/2/2013	detailed review to CAISO 12/26/12 comment letter and response to Sierra Club data request	1.00	1.00				
4/4/2013	detailed review to CAISO 12/26/12 comment letter and response to Sierra Club data request	4.00	4.00				
4/5/2013	detailed review to CAISO 12/26/12 comment letter and response to Sierra Club data request	2.00	2.00				
4/8/2013	comparison of CAISO raw solar output data to solar decline rate curve used by CAISO to assert need for flexible capacity	1.00	1.00				
4/9/2013	comparison of CAISO raw solar output data to solar decline rate curve used by CAISO to assert need for flexible capacity	1.00	1.00				
4/11/2013	comparison of CAISO raw solar output data to solar decline rate curve used by CAISO to assert need for flexible capacity	4.00	4.00				
4/12/2013	comparison of CAISO raw solar output data to solar decline rate curve used by CAISO to assert need for flexible capacity	7.00	7.00				
4/13/2013	review of raw wind output profiles used by CAISO to estimate 2014-2016 flexible generation needs	3.00	3.00				
4/15/2013	review of raw wind output profiles used by CAISO to estimate 2014-2016 flexible generation needs	2.00	2.00				
		Hours	1	2	3		
	TOTAL	75.50	71.50	0	4	0	