

## Stakeholder Comments Template

Submitted by	Company	Date Submitted
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Please use this template to provide your comments on the FRACMOO Phase 2 stakeholder initiative Revised Straw Proposal posted on May 1, 2017.

Submit comments to [InitiativeComments@CAISO.com](mailto:InitiativeComments@CAISO.com)

**Comments are due May 22, 2017 by 5:00pm**

The Revised Straw Proposal posted on May 1 and the presentation discussed during the May 8 stakeholder web conference may be found on the [FRACMOO](#) webpage.

Please provide your comments on the Revised Straw Proposal topics listed below and any additional comments you wish to provide using this template.

SDG&E appreciates the opportunity to comment on the CAISO's FRACMOO 2 Revised Straw Proposal. SDG&E's primary takeaway, from the stakeholder meet and the substance of the proposal, is that the CAISO should suspend its efforts on trying to find a short term solution that cannot be implemented until 2019 and focus its efforts on a long term solution which *CAN* be implemented by 2020 if not sooner.

### **Short term Enhancement**

SDG&E understands that the CAISO wishes to provide market signals to ensure fast ramping and fast starting resources remain online for the future to better integrate a 50 percent RPS

mandate. The CAISO’s second objective is to minimize RPS curtailment in both the short and long-term as the state reaches toward 50 percent RPS.

Based on the CAISO’s proposal parameters, SDG&E estimates that 17,000 MW of dispatchable resources would not qualify for EFC based on the data available in the 2017 Final EFC list. Of that amount, nearly 13,820 MW of EFC and 18,245 MW of NQC are located within certain Local areas. This can be seen in the table below.

Area	EFC Value	NQC Values
Bay Area	2906.68	4393.1
Big Creek-Ventura	2403.2	2743.2
Fresno	48.99	50.5
LA Basin	5683.66	6872.88
NCNB	467.73	812.73
San Diego-IV	2196.21	3093.21
Sierra	114.27	280
CAISO System	3320.99	5042.16
<b>Grand Total</b>	<b>17141.73</b>	<b>23287.78</b>

Without these resources, nearly all Local areas would be deficient of Local capacity to meet the CAISO’s LCR requirements.

Assuming these resources remain online to support Local and System RA requirements, the supply stack in the CAISO’s markets are not expected to change in the short-term. RPS curtailment will not decrease and may actually increase since these resources will no longer be required to bid into the energy markets. Unfortunately, SDG&E believes the CAISO’s proposal to shift the commitment of flexible capacity from long start to shorter start resources will not be able to resolve CAISO’s secondary objective.

Finally, the CAISO should not adopt an interim measure which would have profound disruption to the bilateral market and one that will be insufficient to the long term.

### **Long-term enhancements**

SDG&E has previously recommended a holistic review of the issues for flexibility. Price signals should not only be limited to the bilateral capacity market, but also the CAISO’s energy market. Energy market prices should tell generators to shut down during times of over-supply. This would not only apply to long-start/long-run resources, but also all of the must-take generation that contribute to the over-supply. Looking at the 17,000 MW of capacity discussed previously, SDG&E is estimating nearly 6200 MW of pmin. The CAISO should be capable of managing the dispatch of these flexible resources. Ignoring other contributors of over-supply will only kick the can down the road as the state nears or surpasses 50 percent RPS.

SDG&E highly recommends the CAISO to set working groups to review the long term issues and look for solutions before another proposal is posted. SDG&E accepts that this may delay the CAISO’s posted schedule, but believes efforts would be better spent here.

The CAISO has also mentioned that in Q3, 2017, it will be starting a new initiative to revamp RA. This is supposed to review all aspects of RA to ensure the policies and rules in place are still relevant to the changing landscape of the grid. SDG&E would recommend to the CAISO to consider all aspects of RA, Local, System and Flexible RA, while incorporating energy market solutions in that initiative. It is important to view the issues holistically rather than continuously applying bandaids that never solve the underlying problems because of siloed solutions.

### **EFC category consideration**

SDG&E wonders if changing the definition of flexible categories to meet the secondary objective might be feasible. Category 1 resources would be short-start/short-run resources. Category 2 resources would be long-start/long-run resources. Category 3 resources would be primarily geared towards use-limited resources just as today. Category 2 capacity would be capped at a ratio of the (average minimum net load forecasted for an individual month minus the must-take generation output of non-variable energy resources) divided by the total pmin of the long-start/long-run resources on the EFC list. This may help minimize the amount of category 2 resources procured by LSEs but still allows category 2 resources to be used for ramping needs. The must offer obligations for the categories would have to be changed to all be the same for simplicity. If implemented correctly, CAISO’s opportunity cost adder established in CCE 3 should ensure use-limited resources are dispatched at the economic hours of the year.

SDG&E believes this enhancement may work in the short as well as the long-term.

### **Appendix**

Below are the resources that SDG&E estimates would potentially fall under the CAISO’s short-term proposal that would no longer qualify to provide flexibility. This list was created from the 2017 final EFC list as of Dec 31, 2016 and cross referenced with the NQC list for 2017. No non-public information was utilized.

Area	EFC Value	NQC Values
Bay Area	2906.68	4393.1

CALPIN_1_AGNEW	8	28
DELTA_2_PL1X4	560	813
DUANE_1_PL1X3	137.8	147.8
GATWAY_2_PL1X3	425.9	555.9
GILROY_1_UNIT	10	105
LMEC_1_PL1X3	366	556
METEC_2_PL1X3	390	570
MOSSLD_2_PSP1	368.98	510
MOSSLD_2_PSP2	370	510
RUSCTY_2_UNITS	270	597.4
<b>Big Creek-Ventura</b>	<b>2403.2</b>	<b>2743.2</b>
LEBECS_2_UNITS	610	750
MNDALY_7_UNIT 1	195	215
MNDALY_7_UNIT 2	195.29	215.29
ORMOND_7_UNIT 1	641.27	741.27
ORMOND_7_UNIT 2	725	775
PANDOL_6_UNIT	36.64	46.64
<b>Fresno</b>	<b>48.99</b>	<b>50.5</b>
AGRICO_7_UNIT	48.99	50.5
<b>LA Basin</b>	<b>5683.66</b>	<b>6872.88</b>
ALAMIT_7_UNIT 1	164.56	174.56
ALAMIT_7_UNIT 2	165	175
ALAMIT_7_UNIT 3	312.18	332.18
ALAMIT_7_UNIT 4	315.67	335.67
ALAMIT_7_UNIT 5	427.97	497.97
ALAMIT_7_UNIT 6	425	495
BRDWAY_7_UNIT 3	47	65
CORONS_6_CLRWTR	8	28
ETIWND_7_UNIT 3	295	320
ETIWND_7_UNIT 4	295	320
HARBGN_7_UNITS	35	100
HNTGBH_7_UNIT 1	205.75	225.75
HNTGBH_7_UNIT 2	205.8	225.8
INLDEM_5_UNIT 1	165	335
LGHTHP_6_ICEGEN	6	48
REDOND_7_UNIT 5	168.87	178.87
REDOND_7_UNIT 6	165	175
REDOND_7_UNIT 7	375.96	505.96
REDOND_7_UNIT 8	365.9	495.9
SBERDO_2_PSP3	364.5	484.5
SBERDO_2_PSP4	364.5	484.5
SENTNL_2_CTG1	91	92.09
SENTNL_2_CTG2	91	92.4

SENTNL_2_C TG3	91	92.36
SENTNL_2_C TG4	91	91.98
SENTNL_2_C TG5	91	91.83
SENTNL_2_C TG6	91	92.16
SENTNL_2_C TG7	91	91.84
SENTNL_2_C TG8	91	91.56
VERNON_6_MALBRG	78	134
<b>NCNB</b>	<b>467.73</b>	<b>812.73</b>
ADLIN_1_UNITS	8	16
GEYS11_7_UNIT11	46	68
GEYS12_7_UNIT12	28	50
GEYS13_7_UNIT13	34	56
GEYS14_7_UNIT14	28	50
GEYS16_7_UNIT16	24	49
GEYS17_7_UNIT17	34	56
GEYS18_7_UNIT18	23	45
GEYS20_7_UNIT20	18	40
GYS5X6_7_UNITS	61	85
GYS7X8_7_UNITS	52	76
NCPA_7_GP1UN1	11	31
NCPA_7_GP1UN2	8	28
NCPA_7_GP2UN4	37.73	52.73
SANTFG_7_UNITS	33	63
SMUDGO_7_UNIT 1	22	47
<b>San Diego-IV</b>	<b>2196.21</b>	<b>3093.21</b>
ENCINA_7_EA2	84	104
ENCINA_7_EA3	90	110
ENCINA_7_EA4	280	300
ENCINA_7_EA5	310	330
LAROA1_2_UNITA1	48	165
LAROA2_2_UNITA1	137	322
OTMESA_2_PL1X3	448.6	603.6
PALOMR_2_PL1X3	365.61	565.61
TERMEX_2_PL1X3	433	593
<b>Sierra</b>	<b>114.27</b>	<b>280</b>
LODIEC_2_PL1X2	114.27	280
<b>CAISO System</b>	<b>3320.99</b>	<b>5042.16</b>
BUCKBL_2_PL1X3	317.98	490
COLUSA_2_PL1X3	493.8	603.8
ELKHIL_2_PL1X3	249	425
HIDSRT_2_UNITS	546	746
LAPLMA_2_UNIT 1	119.8	259.8
LAPLMA_2_UNIT 2	120.2	260.2

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LAPLMA_2_UNIT 3	146.38	256.15
LAPLMA_2_UNIT 4	123.56	259.54
MRCHNT_2_PL1X3	239.25	419.25
SUNRIS_2_PL1X3	461.02	586.02
SUNSET_2_UNITS	184	236.4
SUTTER_2_PL1X3	320	500
<b>Grand Total</b>	<b>17141.73</b>	<b>23287.78</b>