III.2. San Luis Rule Curve

MBK formulated their rule curve for San Luis Reservoir to achieve their purported operational strategy "to divert as much surplus as possible and to operate upstream CVP and SWP reservoirs to convey surplus stored water when possible." [SVWU 107 p. 44.] As explained below it is my opinion that the MBK's San Luis rule curve formulation inadequately addresses differences in operational flexibility between the No Action and CWF scenarios.

The San Luis rule curve is an operational target in CalSim II which provides a target storage level for each month and is dependent on the South-of-Delta allocation and upstream reservoir storage. The San Luis rule curve is a model operational target that is used to represent operator decisions to move water from upstream reservoirs to South-of-Delta storage. The model simulated San Luis rule curve could differ depending on the available export capacity during winter and spring months, and the need to protect upstream carryover storage in the fall months. In the absence of any other operating criteria controlling the upstream reservoir releases or Delta exports, different San Luis rule curves can result in differences in upstream reservoir releases and storage, and Delta exports. A San Luis rule curve that is set relatively high will encourage release of water from upstream reservoir storage and export of these releases to San Luis Reservoir. Conversely, a lower San Luis rule curve would not drive an upstream storage release for San Luis Reservoir, and would thus maintain upstream storage. The San Luis rule curve could, and should change, when the ability to capture surplus water or export of stored water has changed due to regulatory or infrastructure modifications, and thus provide an opportunity to better maintain the balance between upstream storage flexibility and export capability.

The CWF is a prime example where changes in water delivery infrastructure and operations calls for a corresponding change in the San Luis rule curve. A rule curve that adequately utilized available export capacity and maintained an acceptable level of

upstream carryover storage under the NAA is no longer appropriate under CWF. In the NAA, a higher level of exports in the fall is appropriate, given the export restrictions in the spring. However, under the CWF, the greater ability to capture excess flows in the winter and spring, requires less movement of stored water in the late summer and fall as compared to the NAA. Using this strategy, it is possible to use the north-Delta-Diversion to both develop increased water supply and maintain upstream storage flexibility. To implement this view in the modeling, the Petitioners set San Luis rule curve lower during the fall and higher in the spring in their Alternative 4a, compared to their NAA.

In contrast, MBK's approach ignores the increased flexibility in winter and spring associated with the north-Delta-Diversion in the CWF in setting San Luis rule curves. In doing so, MBK's Alternative 4a rule curve encourages release and export of stored water in the fall to the same degree as in their NAA. This, in conjunction with their other discretionary actions to increase south of delta allocation goals, serves to unreasonably draw down upstream storage. MBK essentially uses the same rule curve for CVP under Alternative 4a as was used in the NAA

Based on my review of MBK's modeling, it is my opinion that MBK's implementation and application of the San Luis reservoir rule curve inadequately acknowledges the changes in operational flexibility that is afforded by the CWF, and that their prioritization of conveying upstream stored water overshadows the additional goals of CWF to maintain upstream storage flexibility.

II. III. Use of Joint Point of Diversion in Setting Allocations

Mr. Bourez states that "DWR/USBR BA Model includes artificial limits on the use of Joint Point of Diversion." [SVWU-100 2: 7 b) 2)]. He also states that, "This assumption tends to artificially and incorrectly keep modeled storage in NOD CVP reservoirs higher under DWR/USBR BA Alternative 4A as compared to the No Action Alternative." [SVWU-107, p. 2.] MBK's statements are misleading. As noted in Ms. Parker's testimony [DOI-33], removing the permitted capacity constraint on the JPOD wheeling capacity alone does not