EXHIBIT SVWU-200

REBUTTAL TESTIMONY OF WALTER BOUREZ, P.E.

- 1. I am a registered civil engineer in the State of California and am employed by the firm of MBK Engineers ("MBK"). I hold Bachelor of Science and Master of Science degrees in Civil Engineering from California State University, Sacramento.
- 2. A copy of my resume, which accurately describes my education and experience, was previously submitted as Exhibit SVWU-101.
- 3. For the rebuttal phase of Part 1 of this hearing, I was asked to prepare exhibits and testimony on the following subjects:
 - Monthly CalSim II outputs from Petitioners' CalSim II modeling for California WaterFix for key operational parameters. (Exhibit SVWU-201.)
 - The problems with Petitioners' modeling assumptions for drought conditions under the No Action Alternative and WaterFix alternative scenarios and the ways these problems can be corrected. (Exhibit SVWU-202.)

Monthly CalSim II Model Output

- 4. Exhibit SVWU-201, "Modeling Output Tables," March 22, 2017, presents tables of monthly CalSim II outputs from Petitioners' CalSim II modeling of the California WaterFix for 29 key operational parameters under the six different scenarios that were analyzed by Petitioners and discussed in their exhibits and testimony for Part 1A of the State Water Board's California WaterFix hearings. The six scenarios are:
 - 1) No Action Alternative (NAA);
 - 2) Draft Biological Assessment Preferred Alternative 4A (Alt4A);
 - 3) Boundary 1 (B1);
 - 4) H3;
 - 5) H4; and
 - 6) Boundary 2 (B2).
- 5. This monthly model output information was not included in Petitioners' Part 1A exhibits and testimony, but was described during the cross-examination of the Petitioners' modeling panel, during which one of their witnesses stated that this information was available through the State Water Board's website. MBK Engineers extracted the data from those modeling outputs and prepared the tables described in Exhibit SVWU-201. Monthly model output information is critical for adequately evaluating the impacts of the California Water Fix Project, because the use of annual output information can mask the impacts that may otherwise occur on a monthly or seasonal basis.

Drought Operations Modeling

6. Exhibit SVWU-202, "Drought Operations Modeling," discusses Petitioners' failure to use CalSim II properly to estimate project impacts during drought periods, even though, with appropriate modifications, CalSim II has the capacity to do so.

- 7. Key findings that are described in detail in Exhibit SVWU-202, "Drought Operations Modeling" are:
 - The petitioners' modeling does not realistically simulate drought conditions.
 - Simulations of drought conditions that are more realistic than those in petitioners' modeling for this proceeding definitely are possible.
 - Many refinements to petitioners' CWF modeling may be made using reasonable modeling criteria that will produce modeled operations with fewer modeled violations of existing requirements. With such refinements, CalSim II modeling can be used to assess the effects of the CWF during critical years. These refinements must be accomplished to disclose effects of the CWF and potential impacts to legal users of water.