| Application No.: | 15-03-003     |
|------------------|---------------|
| Exhibit No.:     |               |
| Witness:         | Robert Sparks |

In the Matter of the Application of Southern California Edison Company (U338E) for a Permit to Construct Electrical Substation Facilities with Voltage over 50 kV: Mesa 500 kV Substation Project

Application 15-03-003 (Filed March 13, 2015)

# TESTIMONY OF ROBERT SPARKS ON BEHALF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

Date: November 30, 2016

# BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of Southern California Edison Company (U338E) for a Permit to Construct Electrical Substation Facilities with Voltage over 50 kV: Mesa 500 kV Substation Project

Application 15-03-003 (Filed March 13, 2015)

#### TESTIMONY OF ROBERT SPARKS ON BEHALF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

#### Q. What is your name and by whom are you employed?

A. My name is Robert Sparks. I am employed by the California Independent System Operator Corporation (CAISO), 250 Outcropping Way, Folsom, California as Manager of Regional Transmission – South. My educational and professional background and job responsibilities are described in my direct testimony previously served in this proceeding on November 18, 2016.

#### Q. What is the purpose of your testimony?

A. The purpose of my testimony is to rebut certain assertion made by the Office of Ratepayer Advocates (ORA) witness Charles Mee in direct testimony served on November 18, 2016. Specifically, I address Mr. Mee's claim that the Commission should approve the "One-transformer Alternative" to Southern California Edison Company's (SCE) Mesa 500 kilovolt (kV) substation project (Mesa Loop-In Project or Project).

# Q. Does ORA's testimony substantively address the technical issues associated with the one-transformer alternative?

A. No, Mr. Mee's testimony provides no independent electrical basis for approving the one-transformer alternative (referred to as Alternative 1 in the CAISO's direct testimony). Rather, it merely asserts that the Commission should rely on the Final Environmental Impact Report (FEIR) studies to justify this alternative. For the

#### REBUTTAL TESTIMONY OF ROBERT SPARKS ON BEHALF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION A.15-03-003

#### Page 2 of 3

reasons stated in my November 18, 2016 Direct Testimony, the one-transformer alternative fails to meet the transmission planning standards adopted by the North American Electric Reliability Corporation (NERC) and does not meet properly defined project objectives, therefore, it is a technologically infeasible alternative to the Mesa Loop-In Project. Mr. Mee's direct testimony does not contradict the CAISO's technical findings regarding the feasibility of the one-transformer alternative.

- Q. Mr. Mee recommends that the Commission limit its consideration by relying only on the SCE data that was used by the FEIR to decide whether the onetransformer Alternative is feasible (despite the FEIR noting that "the [Commission]'s decision-makers will consider CAISO's comments regarding the One Transformer Substation Alternative when making their final decision on the proposed project and the feasibility of alternatives." <sup>1</sup>) Does this recommendation adequately address the technical requirements?
- A. No, Mr. Mee's recommendation would have the Commission ignore identified transmission planning criteria violations. The CAISO identified transmission system overloads under conditions with all transmission elements in service (*i.e.*, P0 conditions under TPL-001-4) based on *existing* generation data. As discussed in the CAISO's November 18, 2016 direct testimony, the one-transformer alternative does not meet NERC transmission planning standards when properly accounting for additional renewable generation facilities outside of the Los Angeles Basin. Failure to recognize this deficiency in the one-transformer alternative in the final decision would be highly problematic and constitute factual error.

## Q. Please summarize your testimony.

**A.** Mr. Mee fails to provide a substantive analysis of the technological feasibility of the one-transformer alternative. Based on the reasons outlined in the CAISO's opening

<sup>&</sup>lt;sup>1</sup> FEIR, p. 291.

## REBUTTAL TESTIMONY OF ROBERT SPARKS ON BEHALF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION A.15-03-003

## Page 3 of 3

direct testimony in this proceeding and comments on the draft environmental impact report, the one-transformer alternative fails to meet NERC transmission planning criteria. As a result, the Commission should approve the Mesa Loop-In Project as proposed by SCE and reject the one-transformer alternative.

## Q. Does this conclude your testimony?

A. Yes, it does.