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UNITED STATES DISTRICT COURT

DISTRICT OF OREGON

KELSEY CASCADIA ROSE JULIANA; **XIUHTEZCATL TONATIUH M.**, through his Guardian Tamara Roske-Martinez; et al.,

Plaintiffs,

V.

The UNITED STATES OF AMERICA; DONALD TRUMP, in his official capacity as President of the United States; et al.,

Defendants.

Case No.: 6:15-cv-01517-TC

DECLARATION OF DR. MARK JACOBSON in Support of Plaintiffs' Response in Opposition to Defendants' Motion for Summary Judgment

- I, Dr. Mark Jacobson, hereby declare and if called upon would testify as follows:
- 1. I have been retained as an expert on behalf of Plaintiffs in this matter.
- 2. I have prepared an expert report for this litigation ("Expert Report"), a true and correct copy of which is attached hereto as **Exhibit 1**. My Expert Report is signed by me. A copy of my Expert Report was served on Defendants on April 13, 2018.
 - a. Attached as **Exhibit 2** to this Declaration are Exhibits E through H to my Expert Report, the central papers discussed within my Expert Report.
- 3. Since my Expert Report was finalized, two independent, peer-reviewed studies have been published that support my expert opinion that countries, including the United States, can transition feasibly and economically to 100% renewable energy by mid-century. The first paper is, *The feasibility of 100% renewable electricity systems: A response to critics*, by Mark Diesendorf and Ben Ellison, published in Renewable and Sustainable Energy Reviews, 93, 318-330 (2018), true and correct copy of which is attached hereto as **Exhibit 3**. The second paper is, *Response to 'Burden of proof: A comprehensive review of the feasibility of 100% renewable-electricity systems*,' by T.W. Brown, T. Bischof-Niemz, K. Blok, C. Breyer, H. Lund, and B.V. Mathiesen, published in Renewable and Sustainable Energy Reviews, 92, 834-847 (2018), a true and correct copy of which is attached hereto as **Exhibit**
- 4. One of the papers, Diesendorf and Elliston, stated: "We find that the principal barriers to 100[% renewable electricity] are neither technological nor economic, but instead are primarily political, institutional and cultural."
- 5. My Expert Report contains:

- a. a complete statement of all opinions I will express at trial and the basis and reasons for these opinions;
- b. the facts or data considered by me in forming my opinions;
- c. any exhibits that I currently plan to use to summarize or support my opinions;
- d. my qualifications, including a list of all publications authored by me in the previous
 10 years;
- e. a list of all other cases in which, during the previous 4 years, I testified as an expert at trial or by deposition, if any; and
- f. a statement of the compensation to be paid for the study and testimony in the case.
- 6. If called to testify in this matter, I would provide testimony as described in the attached Expert Report.

In accordance with 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

DATED this 25th day of June, 2018.

Respectfully submitted,

Dr. Mark Jacobson