



July 17, 2018

Assemblyman Chris Holden, Chair
Assembly Committee on Utilities and Energy
State Capitol, PO Box 942849
Sacramento, CA 94249-0041
Email: assemblymember.holden@assembly.ca.gov
Re: Strong support for AB 813

Dear Chairman Holden:

I am writing to strongly endorse -- and to offer my assistance -- on AB813. As a researcher who studies the California and WECC grid in detail¹, it is clear that regional integration of the CAISO will benefit California directly and substantially. The benefits include:

- Increased access to low-carbon energy supply options;
- Increased job creation in California and in our neighboring partner states, which I have documented in a series of papers and both state and U. S. Federal Congressional and Senate testimonies²;
- Improved coordination of transmission decisions to support system reliability, clean energy generation, and use;
- Partnerships that extend the scope and impact of California's sustainability efforts under both AB32 and SB32, which in turn benefit California rate-payers, citizens of all western U. S. states, and the global community.

Based on my analysis, the claims that the move to a fully independent CAISO board as a prerequisite to its evolution into a western regional transmission organization will expand federal power over California are unfounded. There are several reasons for this, including a) transmission siting to facilitate clean energy generation is driven by project financing and siting options, for which the California market is a dominant driver; and b) the economics of solar and wind projects at costs *below that of fossil-fuel alternatives* in much of the WECC will continue to drive energy CAISO and then regional decisions in ways consistent with the California AB32 and SB32 mandates. As we find in the SWITCH model results from my laboratory (see <http://rael.berkeley.edu/projec/SWITCH>) that if cost management and reliability continue to be key decision-drivers under a regionalized grid management regime, coal imports would continue to decline toward zero, and renewable energy will come to dominate the western grid.

Should more detailed or expanded analysis be useful, I would be happy to expand my comments in support of California's clean energy standards and leadership, which include AB 813.

Yours sincerely,

Professor Daniel Kammen

¹ For example: Wei, M and **Kammen, DM** *et al* (2013) "Deep carbon reductions in California require electrification and integration across economic sectors", *Environmental Research Letters*, **8**, doi:10.1088/1748-9326/8/1/014038

² Wei, M, Patadia, S and **Kammen, DM** (2010) "Putting renewables and energy efficiency to work: How many jobs can the clean energy industry generate in the U. S.?" *Energy Policy*, **38**, 919 - 931.