



**From:** Vanessa Teague <Vanessa.Teague@anu.edu.au>

**Sent:** Tuesday, 31 August 2021 3:40 PM

**To:** Tom Rogers <Tom.Rogers@aec.gov.au>; Thomas Ryan <Thomas.Ryan@aec.gov.au>

**Cc:** andrewstvcourt@greatcactus.org

**Subject:** Corrections to the Senate Counting algorithm

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Dear Mr Rogers and Mr Ryan,

Please find attached our report on the AEC's Senate count.

We have found one instance in which the software breaks ties in a way that is not what is specified in the Electoral Act. We have also noted some other ambiguities that need to be resolved either by amending the Act or by otherwise committing to the exact counting algorithm.

We would be very happy to help you correct the code - you can see our implementation here <https://github.com/AndrewConway/ConcreteSTV>. We could easily make the necessary adjustments to the official code if it was similarly published online.

Also, we support recent proposals to audit randomly selected paper ballots at the end of the digitizing process to give everyone evidence of the accuracy of the process. We would be happy to help the AEC implement these measures securely and transparently.

Yours Sincerely,

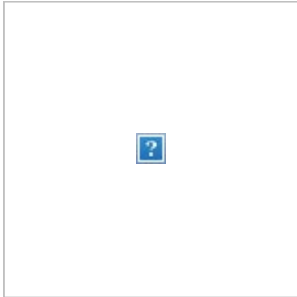
Vanessa Teague and Andrew Conway.

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