1. Physics Motivation (what’s new in addition to what’s stressed in the proposal).

1.a. The proposed measurements on very strange hyperons is still of high impact – No new data emerged since last proposal.

1.b. Cascade electroproduction (using electrons in the forward detector instead of FT. We have already seen decent cascade signals from several people in Very Strange. We could provide the plots showing the MM(eK+K+) spectrum. Any results of cascade electroproduction would be new, whether it’s detailed differential cross sections or simply some total cross sections which should be feasible.

1.c. Studying electroproduction of VS and specifically the Q^2 dependence can provide us with new valuable and complementary information on these states. (no other place than JLab to do this)

1.d The Belle 2018 results (PRL 122, 072501) of “new” [I disagreed with word “new” because there were weak indications in the past] cascades using the -+ spectra is very interesting. CLAS results in 2007 (PRC76,025208) in similar channel did report the Xi(1530) cross section in similar channel (0-), and there was a bump around 1620 MeV but it was not statistically significant.

1.e Excited S=-1 Hyperons: We did mention that in the proposal but not the main part. But it could be a major part of the physics results coming out of Very Strange group.

2. Preliminary Results from very strange:

We should probably show what we have;

2.a eK+-p: Lambda signals

2.b. MM(eK+K+) using forward detectors.

3. Justification for the remaining 50%: Very Strange would clearly benefit from the remaining 50%. We might (I think we need to stay positive – not doing so might hurt us more) end up with OK statistics for ground state cascades or Excited S=-1 hyperons. But excited cascades and Omega would need us much statistics as we can get. For existing RGA data using the beam charge of about 250mC, we expect somewhat 300 (1820) (from a recent exercise from Achyut that used updated CLAS12 simulation) using the upper limit of cross section from g12 (PRC98, 062201, Rapid Communication). Of course, that lower beam energy and the cross section was likely much lower.

For studying the Q2 dependence, we would need as much statistics possible due to the lower cross sections. This measurement would be the first of its kind (right?)

4. Specific requests for the next run conditions: Fall-2018—later conditions seem to be more optimized, so no changes from that? This however would need to be studied in the coming month.

5. The advantage of the electroproduction vs photoproduction for a looking for missing resonances is illustrated in the recent [PLB B805, 135457 (2020)]. The case is that the non-resonance background has a strong Q2 dependency which is vanishing at large Q2.