Question 1 *you use same apparatus as GMn expt and collaborators are almost the same. You get the low epsilon point for free from GMn expt (no new beam time?). Your beam time need comes solely from the large epsilon point at 6.6 GeV beam energy and the energy change. Please correct my mistakes.*

There is no mistake. You are correct.

Question 2 *Motivation could be better.*
a. You make broad statements about need for better nucleon structure. Is there something more specific, e.g. ref. 4 might have something about some aspect that provides needs for ep and en?
b. You had to make the standard choice between a single Q2 measurement at high Q2 vs. measurements at a range of Q2. Could you say more about that?

a. More specifically, The form factors G_M^p, G_M^n, G_E^p and G_E^n, are the basic information on the nucleon partonic structure. They provide the scale for all other functions and GPDs. Accurate determination of the form factors requires a good understanding of the two-photon exchange. A theoretical understanding of the two photon exchange is needed, especially at high Q^2 where the measurements at small and large ϵ are too difficult. The flavor decomposition of the form factors has been proven as a source of important guidance, see the impact of Phys. Rev. Lett. 106, 252003 (2011)[1].

b. Due to the limited choice of beam energy (2.2/4.4/6.6/8.8/11 GeV) it is hard to find a more effective choice. In addition, at $Q^2 < 3$ $(\mathrm{GeV/c})^2$, the two photon exchange is not dominant in the proton Rosenbluth slope and at $Q^2 > 8$ $(\mathrm{GeV/c})^2$ it is not as well determined. We have settled on the value $Q^2 = 4.5$ $(\mathrm{GeV/c})^2$ since another measurement is already scheduled in the E12-09-019 (GMn) run plan.

Question 3 *Inelastic scattering contribution is discussed, but I'm still a little confused. You state that this background is small. Great, but how uncertain is it?*
The singles rate in HCal is huge and apparently the coincidence rate between BigBite and HCal is also large. How uncertain is the inelastic rate?
You base it on a model, how valid is it for your needs?
How much of the inelastic tail do you measure, e.g. how much of Figs. 10

[1] http://arxiv.org/abs/1103.1808

and 11 will come from data? If this background is twice as big as you expect, do you have recourse?

Question 4 *Fig.2 might need more explanation. Apparently, you base your choice in measurement scope and project uncertainty from it.*
What uncertainties are in the results from Ref. 4 - both uncorrected and corrected?
Are these uncertainties included in your estimates?
Will you present your results in a way that theorists can do their own analysis?

"Fig.2 might need more explanation. Apparently, you base your choice in measurement scope and project uncertainty from it."
The Fig.2 of the proposal, which was taken from Ref.4, used by us to estimate nTPE. However, it did not drive our choice in measurement, in part because there is a big uncertainty in the calculations in Ref.4. Instead, we used information on proton TPE as a guidance on the Q^2 value to measure. For the proton we know that TPE become a dominant part of the Rosenbluth slope for Q^2 above 3 $(\mathrm{GeV/c})^2$. The global fit on the proton Rosenbluth slope shown on Fig.1 of our proposal is an extension of the work done by J. Arrington[2], Fig.6 (reproduced here as figure 1) for lower Q^2. The text of the GMp12 paper (draft) is attached. All data points of Fig.1 of the proposal are from Table I of the GMp12 paper draft (attached with the email).

"What uncertainties are in the results from Ref. 4 - both uncorrected and corrected?"
Uncorrected data from Ref. 4 are based on a 1996 review[3] which is now outdated. Actual value at $Q^2 = 4.5$ $(\mathrm{GeV/c})^2$ is a factor 2 larger than the prediction from review[4]. We base our analysis on a value for $\mu_n G_E^n / G_M^n$ from a 2015 review[4] for which the uncertainty is about 10%.
The uncertainty on the prediction of the neutron TPE contribution in Ref.4 of the proposal is indeed very large due to its model dependence. The numerical value of the uncertainty on the neutron TPE prediction is not specified in Ref.4.

[2]Phys. Rev. C68, 034325 (2003), http://arxiv.org/abs/nucl-ex/0305009
[3]Nucl. Phys. A596, 367 (1996), http://arxiv.org/abs/hep-ph/9506375
[4]Eur. Phys. J. A51, (2015), http://arxiv.org/abs/1503.01452

It is large even for proton TPE, as it can be remarked from the growing error of the "corrected" data on Fig.5. of Ref.4, reproduced here on Figure 2.

"Are these uncertainties included in your estimates?"

The uncertainty on $\mu_n G_E^n/G_M^n$ is included in our estimate. Not being explicitly specified, the uncertainty on the neutron TPE prediction from Ref. 4 is not included. We just use this prediction as a guidance for our projected value of the neutron Rosenbluth slope. We assumed that the ratio of the contributions of nTPE and G_E^n to the Rosenbluth is the same as obtained in Ref.4.

"Will you present your results in a way that theorists can do their own analysis?"

We will produce publications providing the measured neutron slope, the nTPE contribution, and the cross sections at both ϵ values.

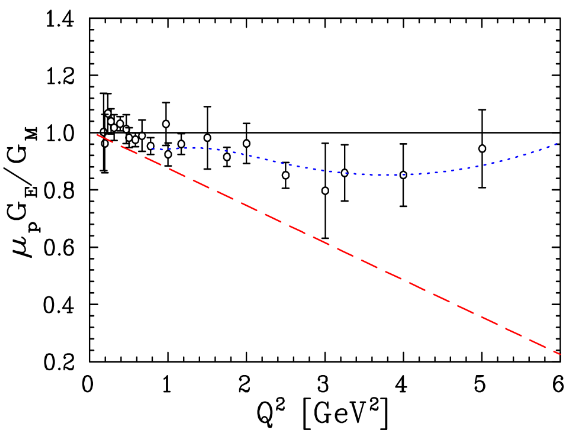

Figure 1: Ratio of electric to magnetic form factor as determined from direct Rosenbluth separations, using the normalizations determined from the global fit. The dotted line is the ratio from the global fit to G_E^p and G_M^p, while the dashed line is the fit to the polarization measurements. Reproduced from Phys. Rev. C68, 034325 (2003), http://arxiv.org/abs/nucl-ex/0305009

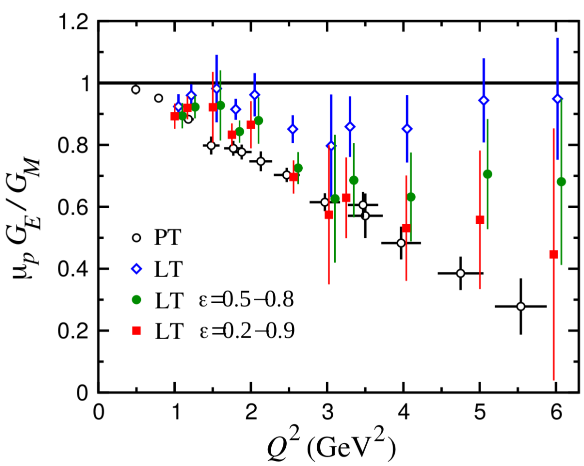

Figure 2: The ratio of proton form factors $\mu_p G_E/G_M$ measured using Rosenbluth separation (open diamonds, noted "LT" here) and polarization transfer (open circles, noted "PT" here). The "LT" points corrected for 2γ exchange are shown assuming a linear slope for $\epsilon = 0.2$-0.9 (filled squares) and $\epsilon = 0.5$-0.8 (filled circles) (offset for clarity). Reproduced from Ref.4 of the proposal.