Dear Editors,

We are submitting a revision of our research article “An analysis of the cost of hyper-parameter selection via split-sample validation, with applications to penalized regression.“ We appreciated the feedback from the Associate Editor and the reviewers.

In this revision, we have substantially updated our paper. We have added four examples to Section 4 to illustrate that the conditions in our results can be established. This required some updates Lemma 2 in Section 4.1.2 that bounds the Lipschitz factor for parametric regression problems with non-smooth penalties. We believe this latest version of Lemma 2 is much more applicable. Based on the reviewers’ comments, we were also inspired to generalize Theorem 2 (and Theorem 4 in the Supplementary Materials) to handle unbounded covariates and noise. Thus Theorem 2 is no longer simply an application of the result in Lecue and Mitchell (2012) but an extension of their results. Finally, we have made extensive efforts to update the notation in paper to be cleaner.

Once again we thank the Statistica Sinica editorial board for the constrictive criticism of our previous submission. We look forward to hearing back from the journal.

Sincerely,

Jean Feng

Noah Simon