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The authors have appropriately addressed my previous comments. Although the impact of the GPC appears to be limited, the boundary condition itself is physically reasonable. Furthermore, in my opinion, demonstrating the practical applicability of the nonlinear (including exponential) boundary condition models on both the anode and cathode sides adds significance. Now I would recommend this manuscript for publication.

[Authors] We thank the referee for the provided feedback, which we believe has contributed to enriching the contents of the manuscript.