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Dear reviewers,

Thank you all for kindly reviewing our work and for providing feedback on our initial manuscript. We have carefully read the comments and updated our paper accordingly. The changes we have made are listed below.

- We added the reference for the experimental results on the laminar flow around cylinder on page 7;
- on page 8, section 3, “Arpack” is now capitalized;
- In page 11, the last sentence in the first paragraph, why has no mesh convergence study been performed?  
Re: it was not performed as there was not enough time for such thorough numerical experiment. This sentence is now removed to avoid confusion;
- Which operation point is used for Fig.8? The most left point?  
Re: the contour plot is done for the left-most data point on the whole-annulus performance curve. This is now clearly stated in the text;
- In page 11, in the first sentence, “one” should be when.  
Re: this is now corrected.

We hope that our revised paper is answering the questions of the reviewers. Thank you again for your time reviewing our work.

Regards,  
Shenren Xu