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# Optimizing Energy Production Using Policy Search and Predictive State Representations – Appendix

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## A Complementary Plots

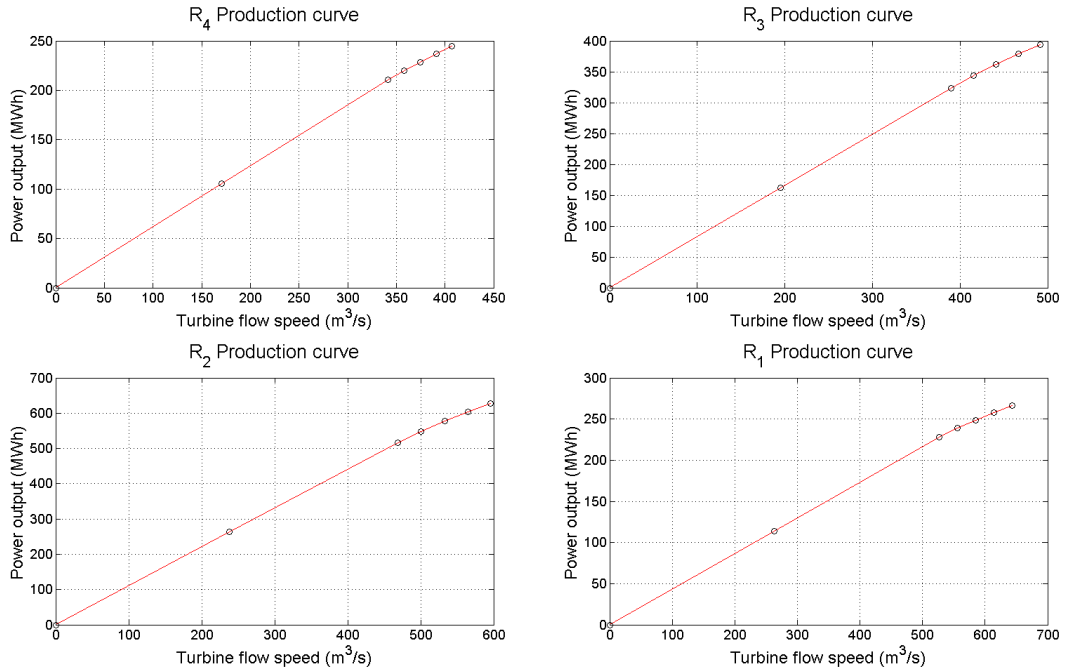


Figure A.1: Production functions of each site. For sites  $R_2, R_3$  and  $R_4$  the curves are given for some reference headwater of the corresponding reservoirs (shown in Fig. A.2). The largest  $x$  value on each curve represents the maximum total speed of the turbines.

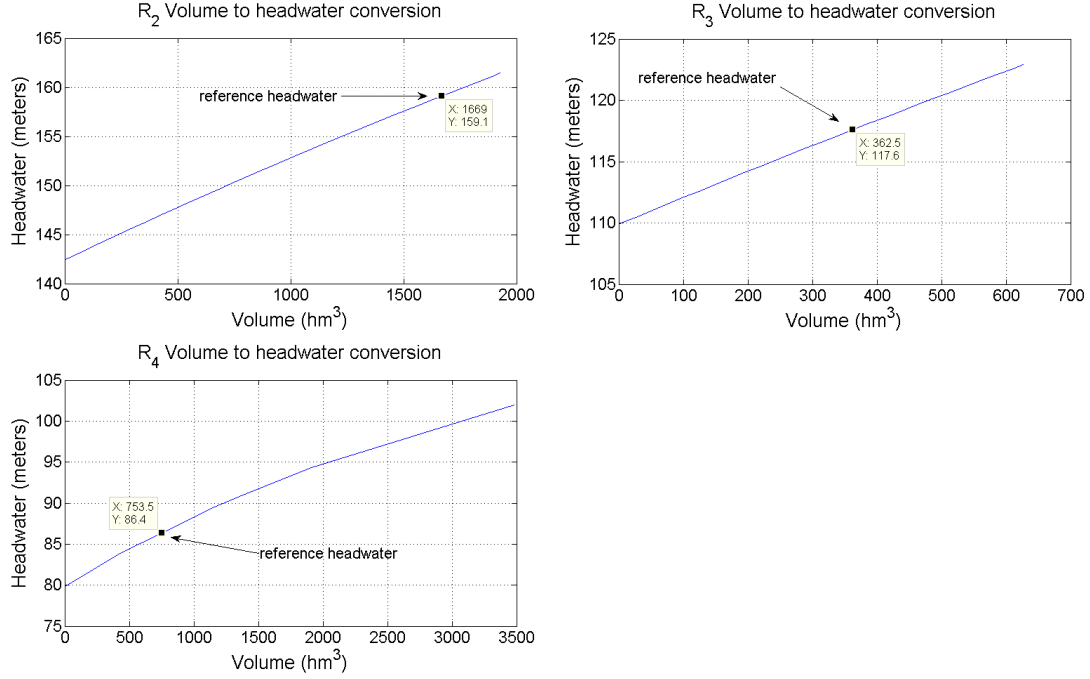


Figure A.2: Volume to level conversion tables for three reservoirs along with the reference points used to calculate the production curve baseline. Maximum capacities of reservoirs  $R_4$ ,  $R_3$  and  $R_2$  are  $3480 \text{ } hm^3$ ,  $626.4 \text{ } hm^3$  and  $1927 \text{ } hm^3$  correspondingly.

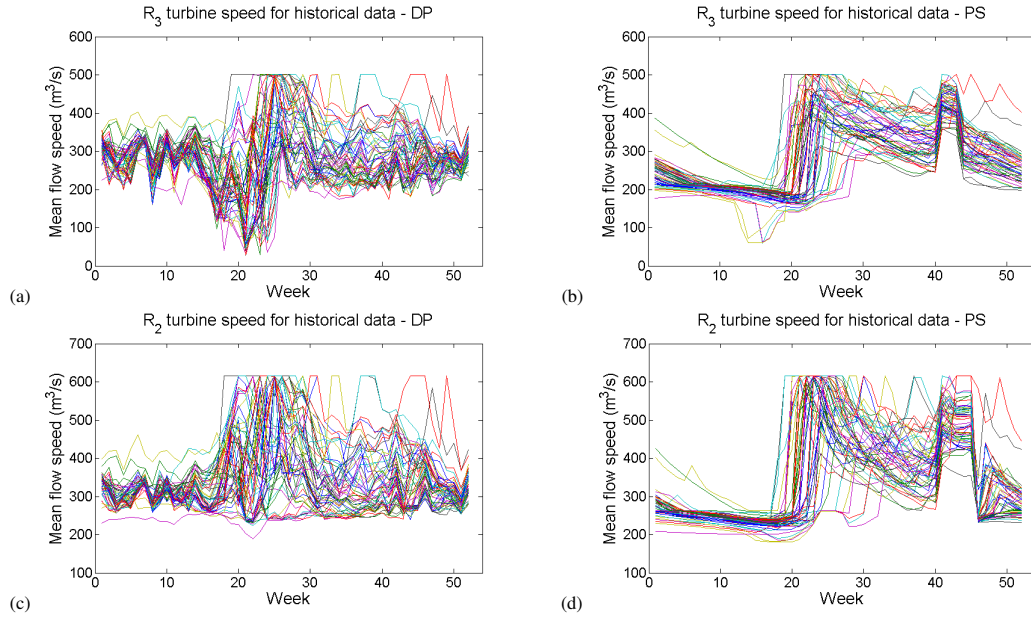


Figure A.3: Qualitative comparison between  $DP$  and  $PS$  with  $pred$  solutions evaluated on the historical data - a complementary figure to Fig. 3 in the paper. Left -  $DP$ , right -  $PS$  with  $pred$ . Plots (a)-(d) show the amount of water turbined at sites  $R_3$  and  $R_2$ .