Modeling the PJM proposed performance scoring algorithm

October 25, 2016
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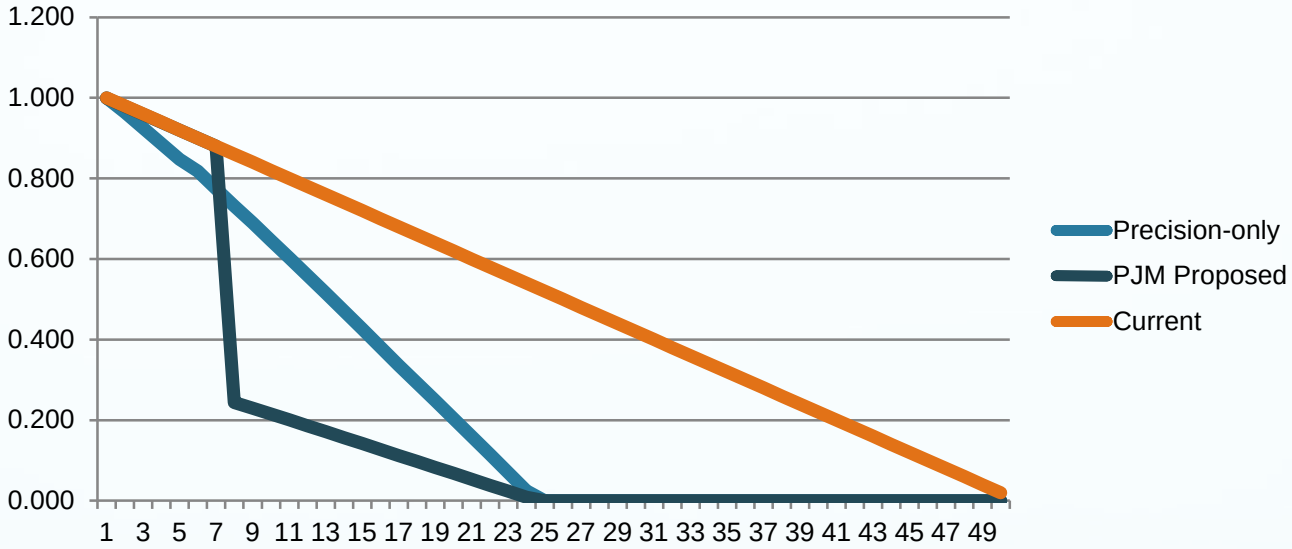
Mosaic Power

Proposed score is not proportional to performance

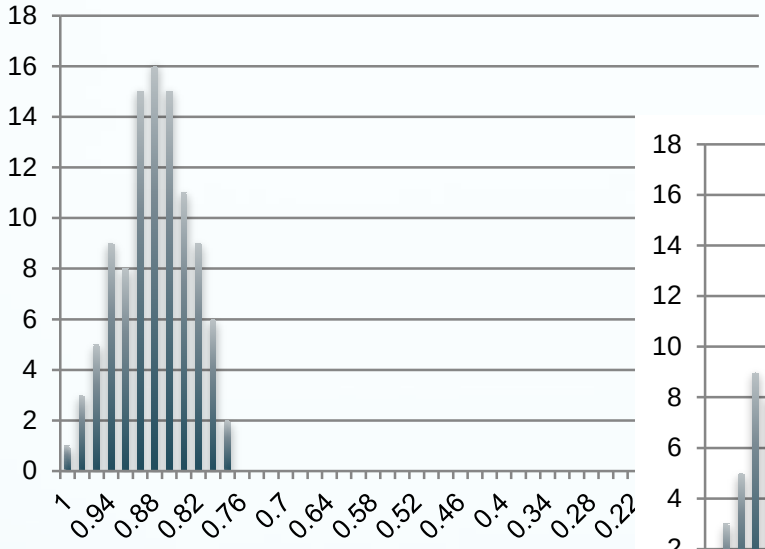


PJM score exhibits a huge discontinuity that does not reflect similar drop in value to the grid

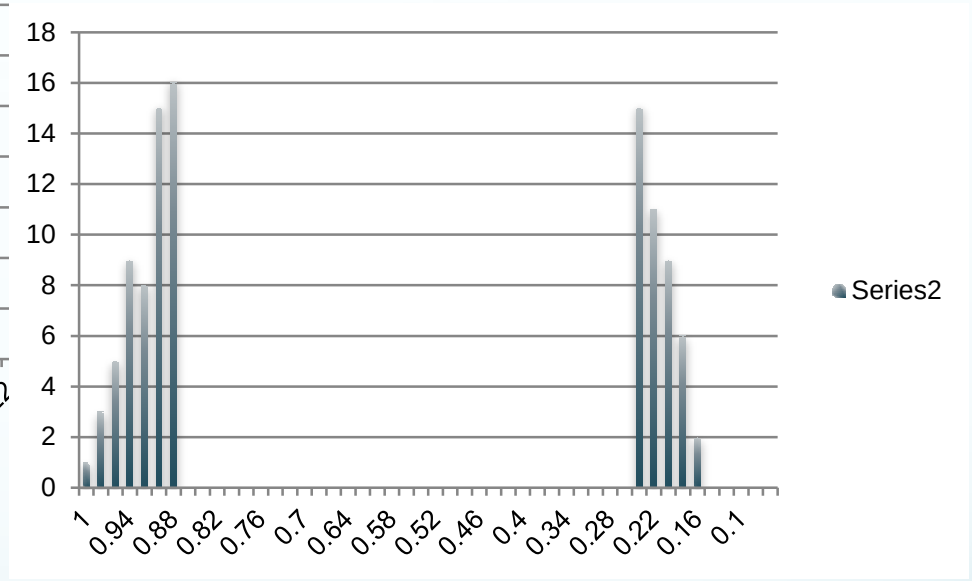
Current score over-values contribution, awarding high scores low values

Precision-only score awards lower scores for lower value, but in a linear way

Score severely penalizes existing resources



Current Algorithm
100-hr Average 88%



New Algorithm
100-hr Average 61%

Current average of 88-90% required to surpass 75% in new algorithm

Very difficult to score less than 84-88%, without dropping to 25%

Model Extract

Model based on slowly decaying delay

Faster decay of correlation

Based on Mosaic modeling of diverse resource types

Different resources will be differently impacted

Current Score	Assumed Delay	Assumed Correlation	Inferred Precision	New Score
1.00	1.000	1.000	1.000	0.999
0.98	0.995	0.980	0.967	0.980
0.96	0.990	0.960	0.932	0.960
0.94	0.985	0.941	0.896	0.940
0.92	0.980	0.922	0.859	0.920
0.9	0.975	0.904	0.823	0.900
0.88	0.970	0.886	0.786	0.880
0.86	0.966	0.868	0.748	0.249
0.84	0.961	0.851	0.710	0.237
0.82	0.956	0.834	0.672	0.224
0.8	0.951	0.817	0.634	0.211
0.78	0.946	0.801	0.595	0.198
0.76	0.942	0.785	0.555	0.185
0.74	0.937	0.769	0.516	0.172
0.72	0.932	0.754	0.476	0.158
0.7	0.928	0.739	0.436	0.145