Convex Optimization of Power Systems - Errata

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- *Ch. 2, page 5.* The equation should read:

$$f(\alpha x + (1 - \alpha)y) \leq \alpha f(x) + (1 - \alpha)f(y) \quad \text{for all } \alpha \in [0, 1],$$

  with the inequality as $\leq$.
- *Ch. 2, page 12 (Example 2.3)* The matrix encoding the standard form second-order cone constraint as a semidefinite constraint should be

$$\begin{bmatrix} (c^T x + d)I & Ax + b \\ (Ax + b)^T & c^T x + d \end{bmatrix} \succeq 0.$$

- *Ch. 2, page 13.* In the SDP standard form, it is more common for the first constraint to be an equality of the form

$$\text{tr } A_i^* X = b_i,$$

  rather than an inequality.
- *Ch. 2, page 38, problem 2.2.* The inequality should read:

$$x^2 - (x - 5)y - yz - xz + 3(z - 5)^2 \leq -1 + 2x - 5z.$$

- *Ch. 2, page 38, problem 2.5.* The function should be

$$f(x) = c_i^T x \quad \text{if} \quad a_i \leq x_1 < a_{i+1},$$

  with the latter inequality being strict.
- *Ch. 3, page 49.* The reference to (3.10) in Section 3.2.2 should instead be to "the reactive power equation in Feasible Set 3.2."
- *Ch. 3, page 83, problem 3.2.* The text should read: "Show that the feasible set of two-commodity network flow is NOT a relaxation of power flow."