

$$investment_{y,p} \sim \text{bernoulli}(\text{logit}^{-1}(\hat{Y}))$$

$$\hat{Y}_{y,p} = b_p^{obs} + b_y^{ry}$$

$$b_y^{ry} \sim \text{Cauchy}(0, \sigma^{ry})$$

$$b_p^{obs} = A_{tso} + \mathbf{B}_{tso,k} \times \mathbf{X}_{p,k}$$

Intercept
Pumped Storage
Reservoir
Utility owned
Nameplate capacity
age

$$A_{tso} = \alpha_{rps}^A + \beta_{rps}^A \times \text{intermittent}_{tso} + A_{tso}^{\text{re}}$$

$$\mathbf{B}_{tso,k} = \alpha_{rps,k}^B + \beta_{rps,k}^B \times \text{intermittent}_{tso}$$

$$\alpha_{rps} \sim \text{Cauchy}(0, \sigma^\alpha)$$

$$\beta_{rps,k} \sim \text{Cauchy}(0, \sigma^\beta)$$