ARIN IPv6 Policy

- All eggs in one basket – all in one prefix.
- Huge Risks:
  - /32 hijacked = organization offline?
  - /32 is route flap dampened = organization offline?
  - /32 is taking a huge DDoS – can't null route the /32 or the specific prefix = organization offline?

ARIN IPv6 Policy (2)

- Deaggs filtered in some operator networks
  - Limit techniques for T+E, moves, adds, deletes, changes
  - Less flexibility in overall routing policy by operators
  - Not every network is a subscriber access network!
- More orgs decide to use IPv6 PA and PI – use your one /32 PI prefix wisely, PA for all else?
- NRPM 4.10 – Allocations up to /28?!!!

ARIN IPv6 Policy (Dyn Inc)

- BCP 16 – Cannot be satisfied to maximum level – can have separate LAN segments internally but still routed on same prefix externally

- No multiple networks support!
  - You get one /32. We operate >10 island networks!
  - This means we "anycast" the /32, and deagg within upstreams with site specific /48s. Limiting for TE efforts upstream from peers.
  - We will never meet the required HD ratio to get another prefix.