Consolidating Failover & Graceful Restart?

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High-level Differences

- draft-galtzur-l2tpext-gr
  - Establish new control connection after failover
  - Re-signal all previously established sessions within recovery time
  - L2TPv3 centric
- draft-ietf-l2tpext-failover
  - Establish temporary control channel to reset/resync original control channel. Allows existing L2TPv2 tunnel-id programmed on the data plane to remain unchanged.
  - After recovery time, query peer for sessions that appear to be stale

Combination

- Need recovery tunnel concept from failover draft to prevent updating data plane with new tunnel id for L2TPv2
- Allow normal processing of ICRQs with GR AVP and receiving traffic to refresh the sessions. Delay initiating the ICRQs to allow the traffic detection to refresh the bulk of the sessions.

Result

- End up with the scaling impact of the GR draft and the complexity of the Failover draft instead of the desired opposite.
- Likely easier to implement both drafts
  - GR draft simplicity is appealing for rather static L2VPN scenarios. Good fit with LDP GR (rfc3748)
  - Failover draft is appealing for highly scaled L2TPv2 deployments.