PCEP Extensions for RSVP-TE Local-Protection with PCE-Stateful

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draft-cbrc-pce-stateful-local-protection

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Context

• PCE can directly control the TE-LSP (draft-ietf-pce-stateful-pce, draft-ietf-pce-pce-initiated-lsp)

• A PCE (solution) can offer better traffic engineering of protection domain
  – RFC4655: Bandwidth Protection
  – Stateful E2E mechanism are addressed in draft-ananthakrishnan-pce-stateful-path-protection
What is addressed by this draft

• Stateful control of Local protection (RFC4090)
• 1:N Local protection (N>=1)
• Facility Backup
• Local protection control
• PCEP Extensions
What is protected, by whom?

Depends on your application:

• Independent Bypass LSP Mapping: PCC policies (as of today)

• Dependent Bypass LSP mapping: Explicit association from PCE, make use of the PCE global view and constraints (delay, diversity, ..etc)
Extensions

– **BYPASS TLV** - The Bypass TLV carries information about the bypass tunnel. It is included in the LSPA Object in LSP State Report and LSP Update Request messages

– **LOCALLY-PROTECTED-LSP TLV** - contains a list of LSPs protected by the bypass tunnel
Next Steps

- Describe the impact on the protocol
- Integrate Comments