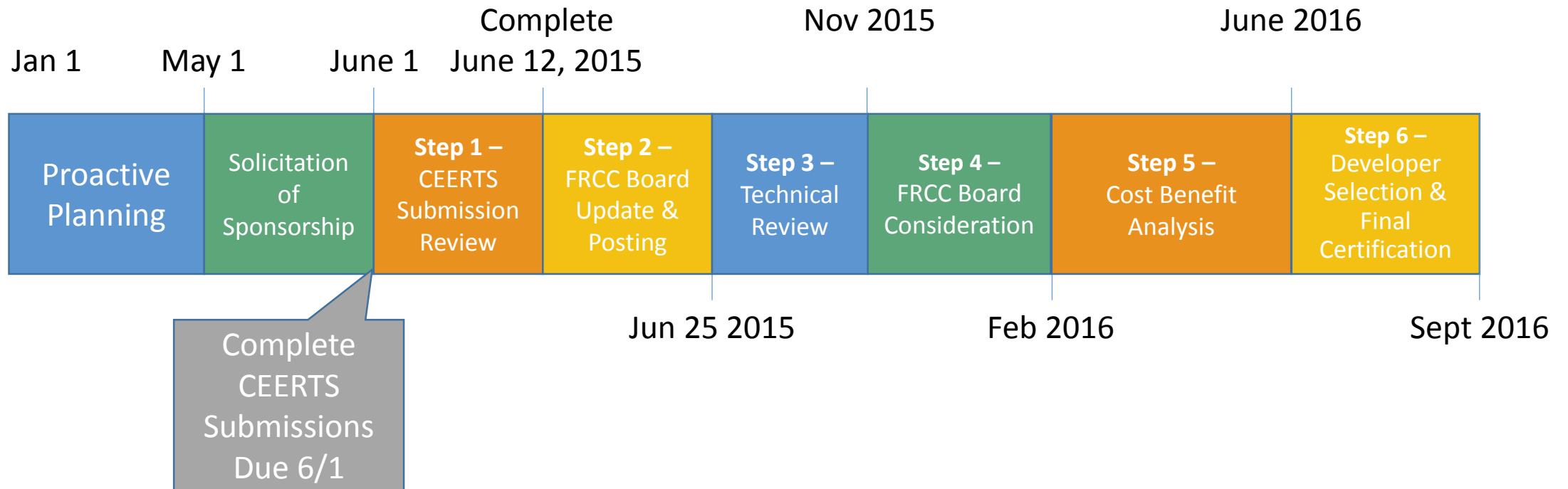




FRCC Biennial Transmission Planning Process (BTPP) – Step 3 Consultant Seminar

June 23, 2015

BTPP Timeline





Projects Subject to Evaluation

Potentially Displaced Project

Image Redacted

NOTE: DEF provided the following list of reliability benefits that are expected from the original planned project¹:

The primary reliability benefit is that the project provides an additional 230kV source for the load area south of Avon Park with the connection introduced at the mid or lower portion of this load area providing needed voltage and thermal support for the loss of the Avon Park – Ft. Meade 230 kV lines.

An ancillary reliability benefit is that a 2nd Bulk Electric system (BES) transmission connection from Vandolah to DEF's system will provide needed operations and maintenance flexibility, such that multiple BES and non-BES transmission line forced and planned outages in the area can be reliably accommodated without significantly impacting neighboring utilities or the availability of existing Network resources to serve Network load in the DEF area.

¹ The potential reliability benefits have not been fully vetted by the FRCC PC.

Sponsored CEERTS Project #1

Whidden – Spring Valley 230 kV Line

Image Redacted

- 28 - 31 mile transmission circuit between FPL Whidden and DEF Spring Valley in service in 2022
- Potentially displaces DEF Vandolah - Spring Valley 230 kV Line

Sponsored CEERTS Project #2

Whidden – Fisheating Creek 230 kV Line

Image Redacted

- 29.8 mile transmission circuit between FPL Whidden and DEF Fisheating Creek
- Potentially displaces DEF Vandolah - Spring Valley 230 kV Line



FRCC Overview of Consultant Activities in BTPP Step 3

Step 3 - Introduction

It is the responsibility of the consultant to take input from the FRCC RPS and provide feedback to that input, but ultimately, the final report shall be the independent evaluation by the consultant.



Step 3 - Evaluation

Using load flow cases provided by the FRCC RPS

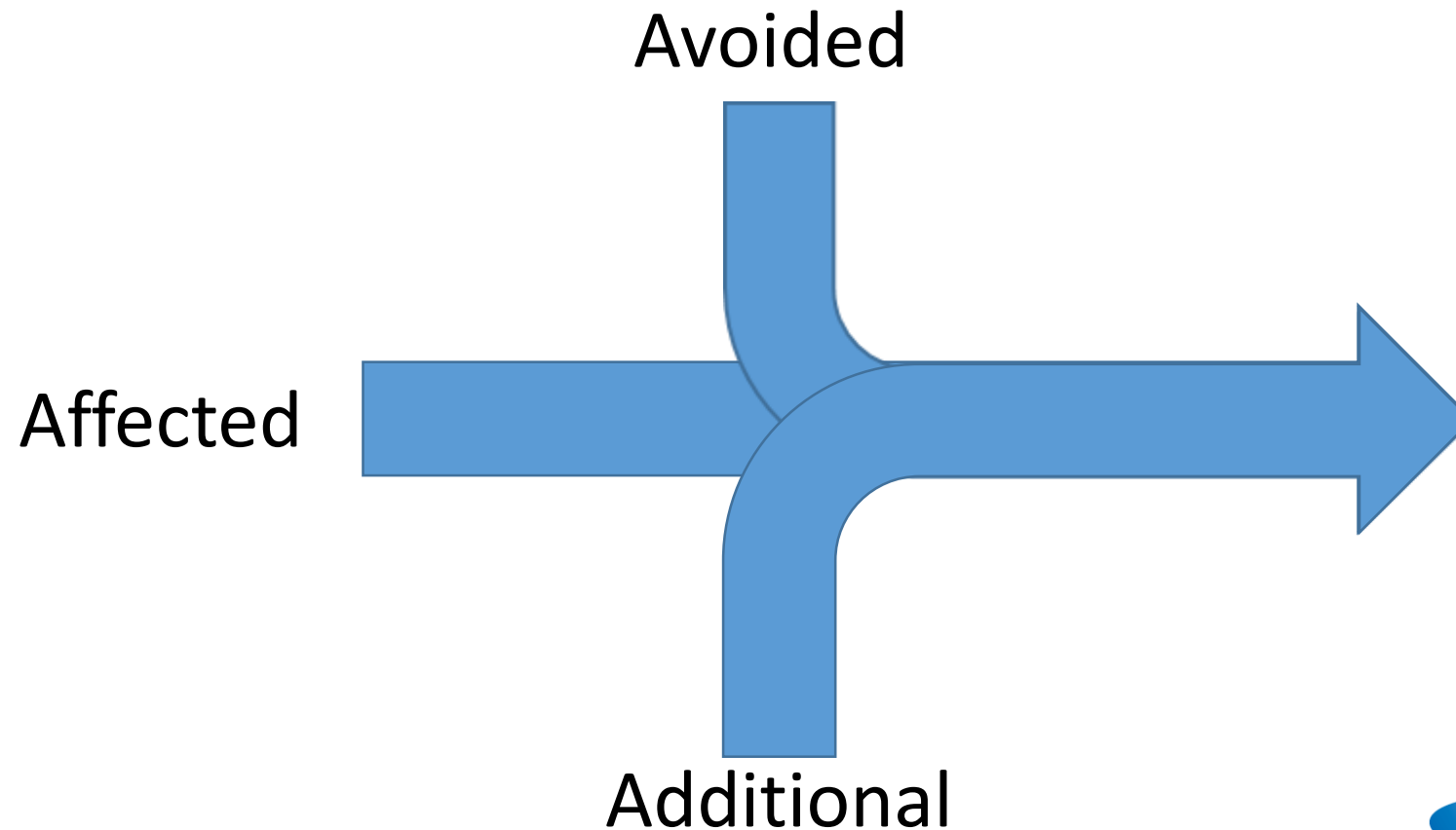
- Validate/develop data
- Identify avoided/affected/additional projects
- Verify NERC Reliability Standard Compliance
- Validate project feasibility

Step 3 – Validate / Develop

- Validate/develop transmission project technical information (Step 3 – A.1 a-c)
 - Build a set of valid and complete modeling data that will be used to conduct technical analysis.



Step 3 – Avoided / Affected / Additional



Step 3 – Avoided / Affected / Additional

Identify avoided projects in the current regional plan

1. List of displacement criteria provided by enrolled transmission provider responsible for potentially displaced project.
2. Consultant will create a list of displacement criteria based on #1, providing rationale for any differences from the list in #1.
3. Consultant will identify avoided projects based on the criteria developed in #2.

Step 3 – Avoided / Affected / Additional

Identify affected projects in the current regional plan

1. Consultant will develop criteria for determining “affected” projects in the current regional plan.
2. Consultant will identify affected projects in the current regional plan for each proposed CEERTS project.

Step 3 – Avoided / Affected / Additional

Identify additional related local projects

1. Based on NERC Reliability Standard compliance, or physical integration of a proposed CEERTS project, the consultant will identify necessary additional local projects

Step 3 – NERC Compliance

Verify NERC Reliability Standard compliance of the fully integrated proposed CEERTS project including the effects of any avoided, affected or additional projects.

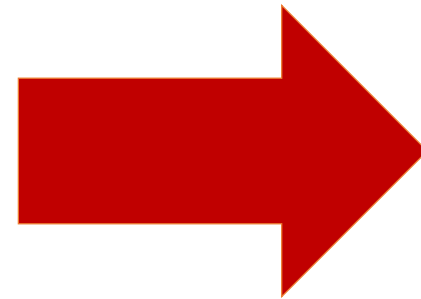


Step 3 – Project Feasibility

Validate the proposed CEERTS project cost estimate and in-service date.



Step 3 - Timeframe



Questions ?



References

- FRCC Regional Transmission Planning Process, Section 6.2 - Biennial Transmission Planning Process – Step 3 (p. 13 of 41)

https://www.frcc.com/order1000/Shared%20Documents/FRCC-MS-PL-018_FRCC%20Regional%20Transmission%20Planning%20Process.pdf