Seams Update

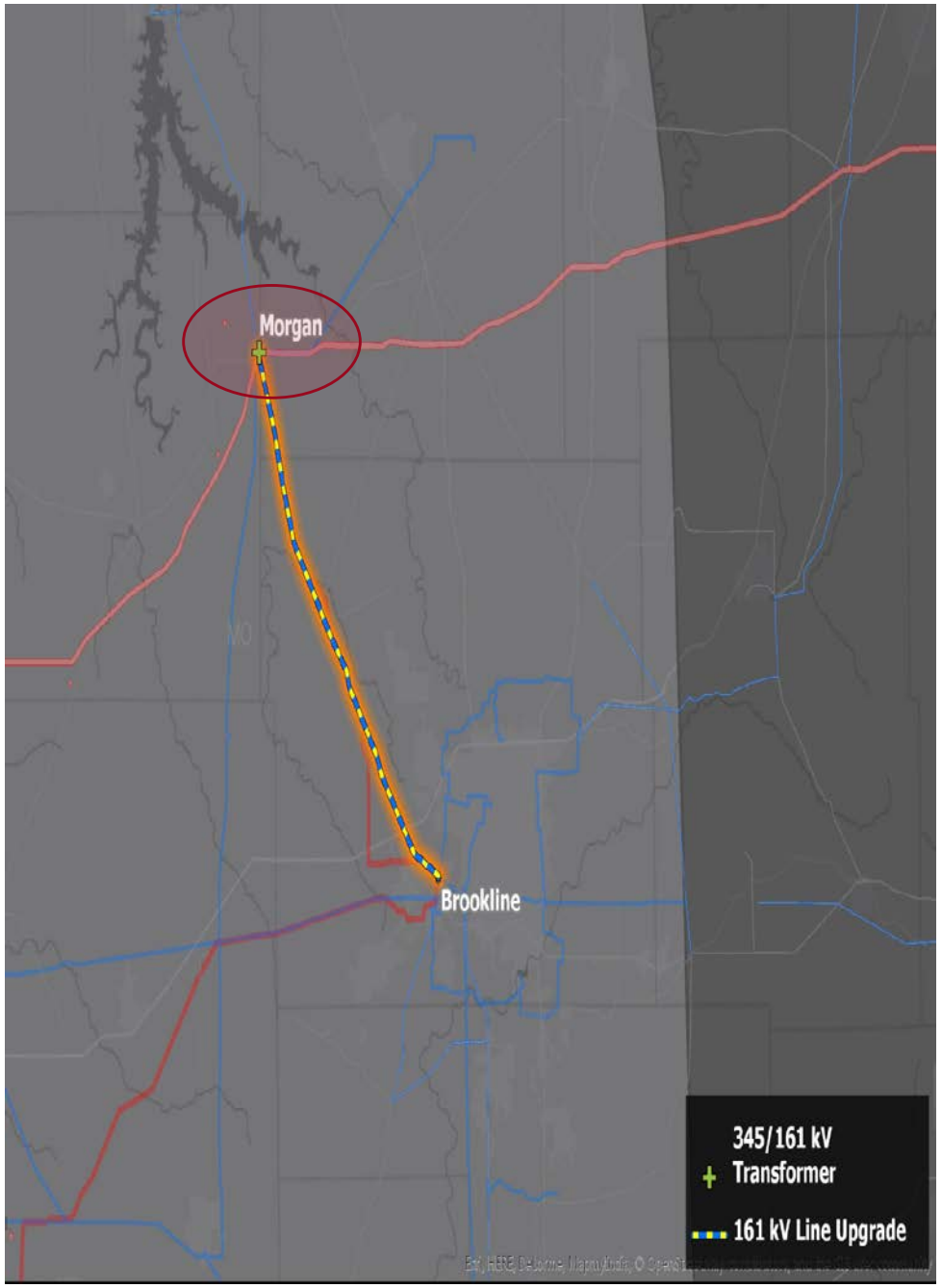
RSC

July 2017

SPP-AECI Joint Projects

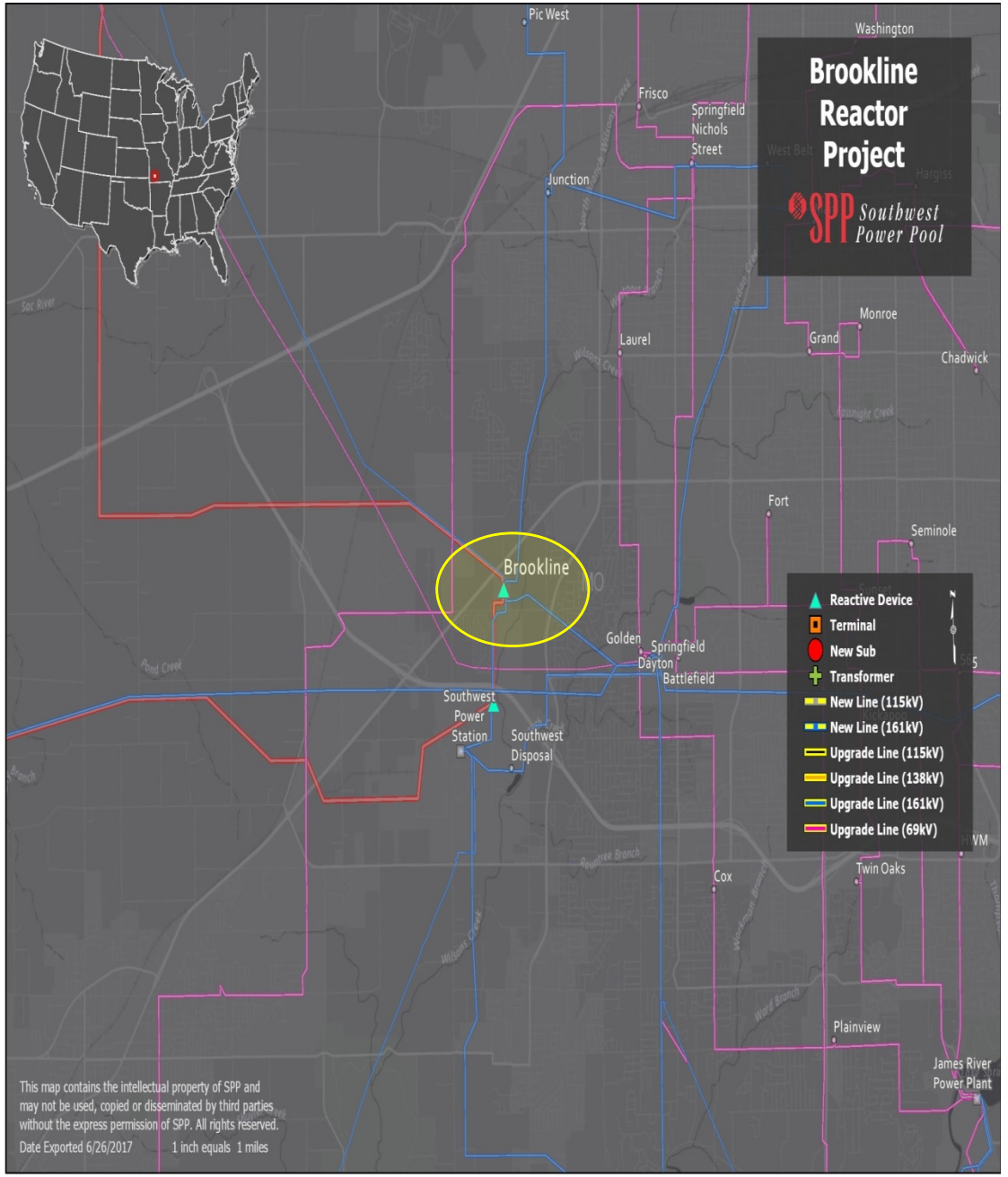
Morgan Transformer Project

- Addition of a new 400 MVA 345/161 kV Transformer at AECI's Morgan substation and an uprate of the 161 kV line between Morgan and Brookline
  - Located in southwest Missouri
  - Wholly on AECI's transmission system
  - $13.75M Cost Estimate



Brookline Reactor Project

- Addition of a 50 MVAR Reactor at City Utilities Brookline 345 kV substation
  - Located in southwest Missouri
  - Wholly on SPP's transmission system
  - $5.0M Study-level Cost Estimate



Approvals

- SPP Board of Directors
  - Approved the Morgan Transformer Project as a part of the 2017 SPP ITP10 Portfolio
  - Approved Regional Cost Allocation of the Morgan Transformer Project
  - Approved the Brookline Reactor Project out of the Regional Review of the SPP-AECI JCSP
- Regional State Committee
  - Approved Regional Cost Allocation of the Morgan Transformer Project
- AECI Board of Directors
  - Met on May 24th, 2017 to approve AECI's participation in both the Morgan Transformer and Brookline Reactor Projects

FERC Filings

- SPP will make a filing at FERC for the two projects
  - Approval of SPP-AECI Joint Projects
  - Cost Sharing between SPP and AECI
  - SPP Regional Cost Allocation
  - Other Issues Related to the Treatment of the Projects
- SPP and AECI met with FERC staff for a pre-filing meeting on June 13th to discuss the purpose of the filing
- SPP is targeting to make the filings shortly following Board of Director's meeting in July

Cost Sharing between SPP and AECI

- Morgan Transformer Project
  - $13.75* Million Study Level Cost Estimate
    - SPP Cost Responsibility - $12.25 Million (89.1%)
    - AECI Cost Responsibility - $1.5 Million (10.9%)
- Brookline Reactor Project
  - $5.0 Million Study Level Cost Estimate
    - SPP Cost Responsibility - $4.85 Million (97%)
    - AECI Cost Responsibility - $150 Thousand (3%)

*Original $9.2 Million Study Level Cost Estimate

*Project still cost beneficial at new cost estimate

Payment Obligations

- Morgan Transformer Project
  - SPP's payment obligation for its portion of the Morgan Transformer Project shall be determined by utilizing SPP's portion of the final costs of the Facility multiplied by a 16% levelized carrying charge for the physical service life of the Facility
- Brookline Reactor Project
  - AECI intends to provide its portion of the costs of the Brookline Reactor Project in a lump sum payment to SPP or CUS as a contribution in aid of construction

Ownership / Capacity

- Morgan Transformer Project
  - AECI will own 100% of the project
  - AECI will construct the project and be responsible for the maintenance and operation of the facility
- Brookline Reactor Project
  - City Utilities of Springfield will own 100% of the project and will be responsible for the maintenance and operation of the facility
  - SPP will assign City Utilities of Springfield to construct the project in accordance with the provisions of the Tariff
- Allocation of Capacity
  - SPP and AECI will allocate the additional transmission capacity based on the allocation of the cost assumed by each Party for the Facilities
  - "Capacity" includes physical capacity of the project and any change in flowgate allocations

Revised 2017 ITP10 Analysis

Project	Future	APC Benefit ($M) 40-year	Cost ($M) 40-year	Net Benefit ($M) 40-year	B/C 40-year
Morgan	F1	$43.3	$24.30	$19.00	1.78
Morgan	F3	$70.1	$24.30	$45.80	2.88
JTEC	F1	$80.1	$34.40	$45.70	2.33
JTEC	F3	$42.4	$34.40	$8.00	1.23

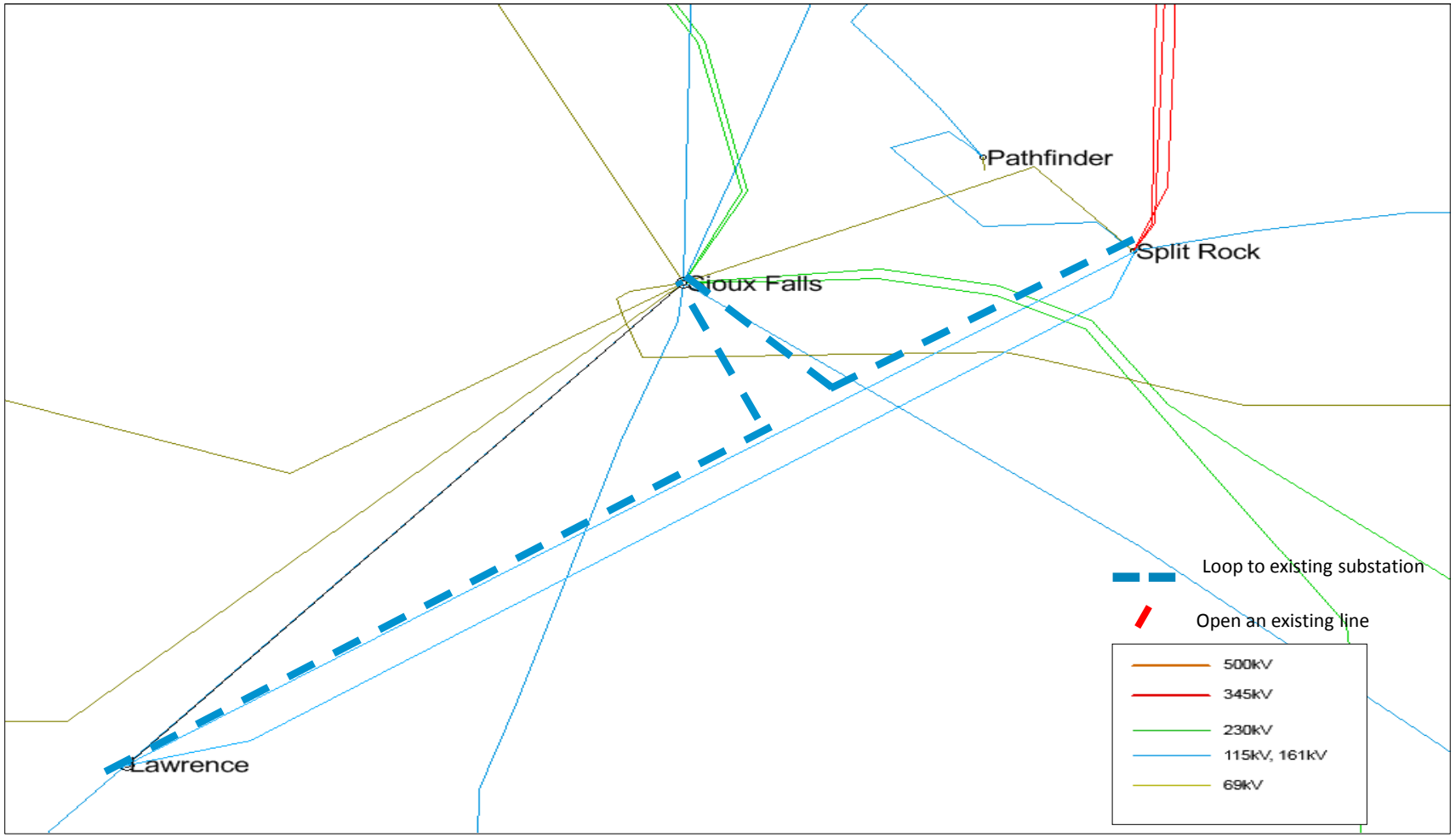
- Revised analysis simply reflects impact of updated cost estimates for both projects
- F1 = Regional Clean Power Plan Implementation
- F3 = Reference Case

SPP-MISO CSP Regional Review

SPP-MISO CSP Regional Review

- 2016 SPP-MISO CSP Recommended Project
  - Loop One Split Rock – Lawrence 115 kV ckt into Sioux Falls (I18) benefit to SPP
- Regional Review
  - SPP staff is currently working with the ESWG and SSC to verify the project's benefits to SPP
  - Process will conclude with recommendations to MOPC and SPP Board in October
- Regional Review Scope
  - Conduct the 2017 Regional Review utilizing the 2017 ITP10 Future 1 and Future 3 2025 sidebar model to calculate a 1-year B/C ratio on the approved Interregional Project
  - 1-year 1.0 B/C requirement (RR Criteria)

I18: Loop One Split Rock-Lawrence 115 kV ckt into Sioux Falls



- **Project Details:**
  - Location: South Dakota
  - **Congestion Analysis:** Completely relieves congestion on Lawrence – Sioux Falls 115 kV
  - **Need:** Sioux Falls – Lawrence 115kV FLO Sioux Falls – Split Rock 230kV