Public Service of New Hampshire d/b/a Eversource Energy Docket No. DE 19-057

Date Request Received: 07/19/2021Request No. RR 1-001Request from:Department of Energy

Date of Response: 07/22/2021 Page 1 of 1

Witness: Lee G. Lajoie

Request:

Please provide a description and process flow diagram of the Company's capital budgeting and funding processes. If this information has been previously provided, please identify where it may be found.

Response:

Initially, Eversource notes that included in Section 3.2 of the settlement agreement (Exhibit 58 in Docket No. DE 19-057) is the agreement for a business process audit as was discussed in testimony at the July 19, 2021 hearing on the second step adjustment. The express purpose of that business process audit as stated in Appendix 2 of the settlement is a "review and assessment of the Company's capital planning, budgeting, approval, and management oversight." Moreover, that business process audit will include review of projects completed in 2020 and 2021, which includes projects covered in the second step adjustment. Eversource anticipates that information relative to those projects, and other information gained from the business process audit, will form part of future recommendations for adjustments in Eversource's processes. The business process audit is being conducted and overseen by Commission Staff (now DOE Staff) but has not yet begun. As such, it may be premature to render decisions on projects that would be covered in the business process audit.

Pending completion of the business process audit, descriptions of the Company's current capital planning, budgeting and funding processes are available in this docket and in other information filed with the Commission. In this rate case proceeding, the initial testimony of Erica L. Menard filed on May 28, 2019 and included as Exhibit 13 in this proceeding includes a narrative description of the Company's capital planning and approval process at Bates pages 7-16. That testimony explains how the Company's processes have evolved since 2015 and the documentation and process steps required for project planning, budgeting, funding, construction, and close out.

In addition, in the Company's pending Least Cost Integrated Resource Plan (LCIRP) proceeding, Docket No. DE 20-161, Attachments F-1 through F-3 at Bates pages 181-216 provide information on the Company's processes. Those materials are attached to this response as Record Request 1-001 - Attachment 1.

Attachment F-1 provides a narrative description of the distribution system planning and capital approval processes, including a description of the "challenge sessions" where each department presents its proposed projects with a cost estimate to a group of Engineering and Operations directors and managers at a Distribution Capital Project Review meeting where those directors and managers evaluate the merits of the proposed projects before any approvals are given.

Attachment F-2 contains process flow diagrams explaining the different planning and approval processes.

Attachment F-3 contains a "job aid" providing detailed instructions and guidance on the Company's internal processes for initiating and obtaining technical and financial approval for capital projects.

Docket DE 19-057 - Exhibit 65

Docket No. DE 19-057 Record Request 1-001 - Attachment 1

PSNH dba Eversource Energy Docket No. DE 20-XXX Least Cost Integrated Resource Plan October 1, 2020 Appendix F-1 - Page 1 of 2

Distribution System Planning and Capital Approval Process Flow Narrative

The development of Eversource's capital investment plan uses the input of various departments including Distribution System Planning, Distribution Engineering, Substation Technical, Substation Engineering, Protection and Controls Engineering, Line Engineering, System Resiliency, System Operations, Substation Operations, Grid Modernization, Distribution Energy Resources, and Energy Efficiency. These departments work together to develop a capital plan which balances the capacity, reliability, resiliency, and operability needs of the system. Each year, the Company identifies the distribution system needs through planning studies, reviews of equipment loading, the identification of asset condition and equipment obsolescence, reliability and resiliency improvement recommendations, system maintenance and operations improvements among others.

Load Forecast

Many of the larger and longer-term project recommendations are initiated by the Distribution System Planning department. This process begins with the development of a 10-year peak load (90/10) forecast. The forecast uses weather normalized historical peak loads combined with Moody's econometric data, spot load data (large additions or subtractions of MW at the substation level) and other inputs to create a bulk substation level load forecast. This process is defined further in the body of the report and in the Distribution System Planning Guide which is provided as an attachment. Eversource is in the process of developing probabilistic forecasting methodologies to better address various penetration levels of such technologies as DER including PV and battery storage as well as electric vehicle charging and electrification of other fossil fuel technologies. These methodologies, once developed, will not change the overall processes used by Eversource, but they will help to establish more granular forecast data to inform system planning.

Annual Distribution Planning Studies

Once the peak load forecast is developed as described above, it is incorporated into the distribution system model which is then used to identify planning criteria violations over a ten-year period. The planning criteria violations include basecase equipment overloads and contingency violations. The Annual Distribution Planning Study assesses bulk substations, the interconnected portions of the 34.5 kV system as well as interconnected portions of the 12.47 kV system which are served from bulk substations. Non-bulk transformer criteria violations are identified by using the peak load forecast for the associated bulk substation combined with anticipated spot loads beyond the non-bulk transformer.

Distribution Planning Solution Studies

Once the planning criteria violations are identified, solutions studies are performed to incorporate additional information such as reliability, asset condition or obsolescence, and maintenance and operating concerns. This information is used to assess whether an NWS is a potential solution or part of a solution to defer the capital investment. The non-wires solution process is defined further in the body of the report and in the Distribution System Planning Guide which is provided as an attachment.

Annual Circuit Loading and Reliability Review

The Distribution Engineering department is responsible for developing the distribution line needs for the 4.16 kV, 12.47 kV, radial 34.5 kV, and Manchester network. These needs include capacity and reliability driven projects and are typically near-term projects that can be engineered and constructed within one

Docket DE 19-057 - Exhibit 65

Docket No. DE 19-057 Record Request 1-001 - Attachment 1

PSNH dba Eversource Energy Docket No. DE 20-XXX Least Cost Integrated Resource Plan October 1, 2020 Appendix F-1 - Page 2 of 2

year. Due to the volatility of peak load at this level of the distribution system, capacity-driven projects are typically proposed to be constructed with limited lead time. Reliability projects are proposed and prioritized with a calculated cost per saved customer minute.

Other Sources of Projects

Other departments such as Substation Technical, Substation Engineering, and Protection and Control determine system needs based on asset condition or obsolescence.

Distribution Capital Project Review (Challenge Session)

Each department presents their proposed projects with a cost estimate to a group of Engineering and Operations directors and managers at a Distribution Capital Project Review meeting. The resulting project list is reviewed, and a proposed capital plan is developed which best balances the competing needs of the system. The plan consists of nondiscretionary annuals (e.g. system repair, line relocations for NHDOT, new service, etc.), multi-year substation or line projects already underway, and new projects proposed. The annual proposed budget is presented to Eversource leadership and once approved is presented to the Board of Trustees.

Each new project or program is required to go through additional technical review and project approval. Substation and Transmission Line projects must receive technical review approval from an Eversource level Solution Design Committee and overall project review approval from the Eversource Project Approval Committee. Each committee consists of Eversource Leadership representing various areas of expertise. Distribution Line projects must receive technical and overall project approval from the New Hampshire Project Approval Committee which consists of New Hampshire Leadership personnel.

Process flow diagrams for project initiation, state project approval and Eversource project approval are included in Appendix F-2. A job aid which outlines the Eversource technical and project approval process is included as Appendix F-3 - Capital Project Approval Process JA-AM-2001-A, Rev. 5.

PSNH dba Eversource Energy Docket No. DE 20-XXX Least Cost Integrated Resource Plan October 1, 2020 Appendix F-2 - Page 1 of 2

Project Initiation Process



Eversource Project Approval Committee Process





PSNH dba Eversource Energy Docket No. DE 20-XXX Least Cost Integrated Resource Plan October 1, 2020 Appendix F-2 - Page 2 of 2

Supplemental Authorization Process

(if required per APS guidelines)



New Hampshire Project Approval Committee Process



Docket No. DE 19-057 Record Request 1-001 - Attachment 1

Eversource

65 PSNH dba Eversource Energy Docket No. DE 20-XXX Least Cost Integrated Resource Plan October 1, 2020 Appendix F-3 Page 1 of 32

Job

Aid

Capital Project Approval Process

JA-AM-2001-A, Rev. 5

Process Owner:

John Dipaola-Tromba

Director, Business and Quality Assurance, Transmission Effective Date: 6/1/2020

Docket DE 19-057 - Exhibit 65

Docket No. DE 19-057 Record Request 1-001 - Attachment 1

Eversource

t 65 PSNH dba Eversource Energy Docket No. DE 20-XXX Least Cost Integrated Resource Plan October 1, 2020 Appendix F-3 Page 2 of 32

Copyright 2018 Eversource Energy

Proprietary and Confidential • All Rights Reserved 56 Prospect Street • Hartford, CT 06103 Phone 800-286-5000



Table of Contents

1 Purpose				
2 Affected Groups				
3 Responsibilities				
3.1 Project Initiator				
3.2 Project Manager (PM)3				
3.3 Project Sponsor				
3.4 Solution Design Committee (SDC)4				
3.4.1 Project Types4				
3.5 Eversource Project Approval Committee (EPAC)4				
3.5.1 Project Types4				
3.6 State Project Approval Committees (CT PAC, MPAC, and NH PAC)5				
3.6.1 Project Types				
3.7 Cost Estimating				
4 General Instructions				
4.1 Project Initiation6				
4.2 Project Initiation for Programs				
4.3 Conceptual Engineering				
4.4 Solution Vetting				
4.5 Preliminary Engineering				
4.6 Full Project Authorization				
4.6.1 Program Approval				
4.6.2 Program Release Authorization				
4.6.3 Delegation of Authority10				
4.7 Detailed Engineering, Siting, and Permitting10				
4.8 Construction and Construction Variance Monitoring10				
4.9 Project Closeout				
5 Instructions for Small Planned Projects				
5.1 Distribution Substation Projects Less Than or Equal to \$50,000 in Direct Cost				
5.2 Transmission Projects Less Than or Equal to \$300,000 in Total Cost & Distribution Substation				
Projects with Direct Cost Over \$50,000 and up to \$100,00011				
6 Instructions for Emergent Work				
7 Definitions & Acronyms				
8 Revision History				
Attachment A, Solution Design Committee Charter				
Attachment B, Eversource Project Authorization Committee Charter				
Attachment C, State Project Approval Committee (State PAC) Charter				
Attachment D, Transmission and Substation Project Approval Process Flow Charts				
Attachment E, Transmission and Substation Project Approval Process Detailed Flow Chart				
Attachment F, Distribution Project Approval Process Flow Chart				

1 Purpose

This job aid provides instructions and guidance on the process for initiating and then obtaining technical and financial approval for capital projects within all three states. This job aid will focus on project initiation, solution vetting by the Solution Design Committee (SDC), and approval of the Project Authorization Form (PAF) by the Eversource Project Approval Committee (EPAC) for transmission and substation projects and by each of the state Project Approval Committees (state PACs) for distribution projects. The authorization forms used by each committee can be found at <u>\\nu.com\data\SharedData\EPAC\Administrative\EPAC Forms</u>. Completed samples of each form can be found at <u>\\nu.com\data\SharedData\EPAC\Administrative\EPAC Forms</u>. This job aid supports the guidance contained in Accounting Policy Statement 1 (APS01), Operations Project Authorization, which can be found on the Eversource intranet at <u>https://eversourceenergy.sharepoint.com/sites/Accounting/SitePages/Accounting-Policies-%26-Procedures.aspx</u>.

2 Affected Groups

As described in Responsibilities and General Instructions, the System Planning, Asset Management, Transmission Interconnections, and Project Management groups, along with the SDC, EPAC, and state PAC committees will have primary responsibility for the project review and approval process. The following general groups will also be affected by this job aid as their participation is critical to the successful initiation, development, review, and approval of capital projects.

- Transmission Line, Substation Design, Substation Technical, Transmission Protection and Control, and Distribution Engineering
- Construction
- Scheduling
- Siting/Permitting
- Environmental
- Siting and Construction Services
- Procurement
- Investment Planning
- Operations
- Engineering Project Controls
- Transmission Project Controls

3 Responsibilities

3.1 Project Initiator

In general, Transmission and Substation Projects will be initiated by either the System Planning (Reliability and Capacity Projects), Asset Management (Asset Condition Projects), or Transmission

Interconnections Department (Interconnection Projects). Distribution street and line projects with no substation scope will be initiated by the Distribution Engineering group. Telecom projects (aside from OPGW projects which will be initiated by the Asset Management group) will be initiated by the Communications Engineering Group. Distributed generation interconnection projects will be initiated by the Distributed Energy Resources Technology Group.

The project initiator will be responsible for securing initial funding from the EPAC for Transmission and Substation projects or from a state PAC for Distribution projects, coordinating conceptual engineering activities, and coordinating the development of conceptual grade cost estimates for alternatives (-25%/+50%). For applicable projects (See Section 3.4.1 below for details), the project initiator will be responsible for presenting the choice of a preferred solution to the SDC. The project initiator will own the PAF, including Program Level PAFs and Program Release Forms, that will be required documentation at the project approval committee meetings. The project initiator shall submit a PAF that includes the financial and technical details, a detailed backup cost estimate, a project checklist, and a Constructability Review Form at least seven working days prior to the next scheduled EPAC meeting for Transmission and Substation projects. For transmission projects, the detailed cost estimate must be in accordance with Attachment D to PP4 (ISO-New England Planning Procedure 4). If a project manager is assigned, the project initiator will support the engineering phase and be responsible for updating the PAF to secure full funding.

For projects that do not have a project manager assigned, the project initiator will be responsible for leading preliminary engineering activities and developing an updated +/-25% planning grade cost estimate. The project initiator will then be responsible for updating the PAF and securing full funding from the EPAC or a state PAC. Once a project is fully approved and funded, project ownership transfers to the project manager for the project execution and closeout phases.

3.2 Project Manager (PM)

Once assigned, the PM will manage the project's schedule and budget and support the conceptual engineering phase by driving collaboration with the various engineering disciplines and affected departments. With support from the project initiator, the PM will be responsible for facilitating preliminary engineering activities and coordinating with the Cost Estimating team to develop cost estimates. Ultimate ownership of the project transfers from the project initiator to the PM once the project is fully approved and funded. The PM will also be responsible for any required supplemental approval with support from the project initiator, if necessary.

3.3 Project Sponsor

Typically, the Project Sponsor will be the director of the project initiator. The Project Sponsor will be responsible for review and approval of project documents before they are submitted to the committees for approval.

3.4 Solution Design Committee (SDC)

The SDC will serve as solution development gate keepers to ensure the best solution is selected, ensure guiding principles are followed, and drive standardization. SDC will review project alternatives, scope, and conceptual grade cost estimates during the solution vetting process. The SDC administrators will use the email address <u>SolutionDesignCommittee@eversource.com</u> to communicate with project initiators and for all committee communications. More information on solution vetting can be found in Section 4.3 and the full responsibilities of the SDC are contained in <u>Attachment A, Solution Design Committee Charter</u>.

3.4.1 Project Types

The SDC will review and approve solutions for the following Transmission and Substation project types:

- System Planning Reliability and Capacity Projects
- Asset Management Programs (OPGW Programs, Breaker Programs, etc.), Rebuilds, Conductor/Cable Replacements, Program releases with significant scope in addition to the program.
- Transmission Interconnection Projects Projects on track to sign Interconnection Agreements may be reviewed by the SDC at the request of the sponsoring engineering director.
- Other Telecom projects and programs

Like-for-like asset replacement projects and individual releases within defined programs with minimal scope variations will not need to be reviewed or approved by the SDC. EPAC member directors will also have discretion to determine whether a specific project or program will require review and approval by the SDC.

3.5 Eversource Project Approval Committee (EPAC)

The EPAC will be responsible for the review and approval of the technical and financial merits of transmission and substation projects. For project and program initiations, the EPAC will review and authorize Initial Funding Request Forms (IFRs) typically up to \$250,000, including Program Level PAFs with initial funding. The EPAC may also review requests for initial funding beyond \$250,000 if a larger funding amount is required to complete preliminary engineering activities. For previously initiated projects and programs, the EPAC will review partial and full funding PAFs, Program Level PAFs, and Program Release Forms. The EPAC will review conceptual grade cost estimates (-25%/+50%) for projects looking to secure partial funding and will review planning grade cost estimates (+/-25%) for projects looking to secure full funding authorization. The EPAC administrators will use the email address <u>TranEPAC@eversource.com</u> to communicate with project teams and for all committee communications The full responsibilities of the EPAC are contained in <u>Attachment B, Eversource Project Authorization Committee Charter</u>.

3.5.1 Project Types

The EPAC will review and approve the following project types:

- Transmission line and/or substation projects (Transmission projects over \$300,000 total cost and distribution substation projects over \$100,00 direct costs)
- Transmission line and/or substation programs (OPGW Programs, Breaker Programs, etc.)
- Telecom projects that impact transmission lines and/or substations
- New or reconfiguration of a distribution substation (regardless of voltage level)
- Substation projects with transmission and distribution components will be reviewed as a package, only by the EPAC
- Customer interconnection requests that require transmission or substation work
- Any other project per the discretion of the EPAC chairperson(s)

All other distribution projects will be reviewed and approved by the state PAC (see section 3.6.1). See Section 5 for review process for transmission projects less than \$300,000 total cost.

3.6 State Project Approval Committees (CT PAC, MPAC, and NH PAC)

The state PACs will be responsible for the review and approval of the technical and financial merits of Distribution projects. There will be three different project approval committees to review and approve the projects; one from each state (CT PAC, MPAC, and NH PAC). The state PACs will review PAFs with conceptual grade (-25%/+50%) estimates for distribution projects looking to secure initial funding and will review PAFs with planning grade (+/-25%) estimates for distribution projects looking to secure full funding authorization. The full responsibilities of the state PACs are contained in <u>Attachment C, State Project Approval Committee (State PAC) Charter</u>.

3.6.1 Project Types

The state PACs will review and approve the following project types:

- Underground distribution project greater than \$250,000
- Overhead and underground-overhead mixed distribution projects over \$1 million
- Customer interconnection requests with total cost estimates (including indirect costs) greater than \$1 million. Customer interconnection projects less than \$1 million are reviewed and approved in PowerPlan and typically will not require review and approval by the state PAC.
- DG interconnection request without substation scope that require a new feeder (regardless of cost) or with total cost estimate greater than \$500,000. Note that DG interconnection projects with substation scope will be reviewed by EPAC as described in Section 3.5.1.)

Note that per APS01, all other underground, overhead, and underground-overhead mixed distribution projects under the dollar thresholds listed above but over \$100,000 direct costs still require PAF documentation. These PAFs will be reviewed and approved directly in PowerPlan. The approving director can use his/her discretion to require any of these projects to be reviewed at the state PAC. See Section 5 for review process information for distribution projects under \$100,000 direct costs. All other transmission and substation projects will be reviewed and approved by the EPAC (see section 3.5.1).

3.7 Cost Estimating

The Transmission Cost Estimating team will support development of project cost estimates for Transmission and Substation projects. Depending on the complexity of the project, the approximate cost, and other factors the level of support provided by the Cost Estimating team may range from taking the lead in developing the estimate to reviewing an estimate prepared by the project team. To request support from the Cost Estimating team, project teams should complete the Estimate Request Form which can be found at <u>\\nu.com\data\SharedData\Estimating-Shared\2</u>) Estimate Templates\1) Est <u>Request form\</u> and submit it to the Manager of Transmission Cost Estimating.

4 General Instructions

The process to proceed with each successive phase of a capital project is designed to ensure that there is a valid need, the right solution alternatives are evaluated, the technical approach is sound, and resources are budgeted and prudently spent. The overall process flow for Transmission and Substation projects is depicted in <u>Attachment D, Transmission and Substation Project Approval Process Flow Charts</u>. <u>Attachment E, Transmission and Substation Project Approval Process Detailed Flow Chart</u> is a 17"x11" flowchart with more detailed descriptions. The overall process flow for Distribution projects is depicted in <u>Attachment F, Distribution Project Approval Process Flow Chart</u>. The initiation and major engineering and approval phases of the process flow charts correspond to the sections below.

These general instructions are for the project types listed in Sections 3.5.1 and 3.6.1. Refer to Section 5 for instructions for planned transmission projects less than \$300,000 or planned distribution projects less than \$100,000. Refer to Section 6 for instructions for securing approval of emergent work.

4.1 Project Initiation

Following the identification of a project need the initiator will secure a project number. Project initiators can email <u>TranEPAC@eversource.com</u> for assistance securing a project number. Project initiators will then complete an IFR and submit it to EPAC via <u>TranEPAC@eversouce.com</u>. The IFR may be used to request funding per Section 3.5. The form can be found at

\\nu.com\data\SharedData\EPAC\Administrative\EPAC Forms\. The initiator will be required to state the project need and objectives and include an explanation of the funding request amount, including a budget for conceptual and preliminary engineering activities and a schedule for returning to EPAC with a full funding request. The IFR may include a budget for initial internal siting and permitting preparation activities. The IFR should not include funding for detailed engineering or procurement of any material. The EPAC chairman may decide to approve the request directly or may request that the initiator present the request for input and feedback to the EPAC.

Once an IFR is approved, the EPAC administrator will send the approved form to Investment Planning to create a project and submit it for Delegation of Authority approvals in PowerPlan, the Eversource software tool for financial approval. The initial funding is obtained once delegation of authority has been performed through PowerPlan in accordance with APS01 (See Section 4.5.3 for more information on Delegation of Authority Policy). Once fully approved in PowerPlan a Work Order (WO) will be

assigned. The EPAC administer will copy the Directors of Project Management on the submittal to Investment Planning so that a Project Manager can be assigned as appropriate. For some projects the Project Manager role may remain with the Project Initiator, be assigned to a lead engineer, or be assigned to a Transmission Line Construction Manager.

4.2 Project Initiation for Programs

Initial funding can also be requested at the program level using the Program Level Project Authorization Form. The form can be found at <u>\\nu.com\data\SharedData\EPAC\Administrative\EPAC Forms.</u> The funding can be used to advance specific project scope under an approved program. Sections 4.5.1 and 4.5.2 contains more information on full approval of programs and program level releases.

4.3 Conceptual Engineering

The project initiator should follow the Project Alternative Process in procedure M2-TP-2018 for the identification, development and selection of project alternatives. As described in detail in M2-TP-2018, the project initiator will lead and coordinate the following activities with support from the PM and input from affected departments:

- Incorporate designs from standards library and develop scope and major equipment lists for all alternatives under consideration.
- Conceptual engineering of all appropriate alternatives including early field review and desktop analysis.
- Identification of key project risks with the appropriate level of detail with respect to constructability, routing, outage planning, possible Single Contingency Loss of Load (SCLL) conditions and applicable mitigation actions, siting and permitting, environmental impacts, community and external stakeholder impacts, site control, procurement, etc.
- Identification of any land rights needs.
- High level routing determinations (for linear projects).
- Develop project strategies to mitigate identified risks.
- Conceptual grade cost estimates (-25%/+50%) for all appropriate alternatives (at least the preferred solution and leading alternative). The project team should request support from the Cost Estimating team for all estimates.

The project team will then recommend a preferred solution and document the rationale for the choice of preferred solution. The Engineering Deliverables document which details activities required for estimating purposes can be found at <u>N:\Estimating-Shared\2) Estimate Templates\4) Estimate</u> <u>Categories & Scope Deliverables\</u>.

4.4 Solution Vetting

Prior to proceeding with Preliminary Engineering of the preferred solution, more comprehensive projects and asset condition projects at the program level will need to be reviewed and approved by the SDC (See Section 3.4.1 for list of project types the SDC will review). Project initiators will submit a Solution Selection Forms (SSF) to the SDC via <u>SolutionDesignCommittee@eversource.com</u> at least five

business days prior to the next scheduled SDC meeting. The SDC will review the SSF and confirm that the project team has selected the best solution. The SSF will require a statement of project need and objectives, documentation of the alternatives analysis, scope and major equipment list for the preferred solution, and a conceptual grade cost estimates for the preferred solution and a leading alternative. The form can be found at <u>\\nu.com\data\SharedData\EPAC\Administrative\EPAC Forms</u>. The full responsibilities of the SDC are contained in <u>Attachment A, Solution Design Committee Charter</u>. Once reviewed and approved by the Solution Design Committee, projects will proceed with Preliminary Engineering.

Transmission and substation projects that do not require review and approval by the SDC such as likefor-like asset replacement projects and individual releases within defined programs with minimal scope variations will proceed directly with preliminary engineering activities and development of a full funding request to present to EPAC.

Distribution street and line projects without substation components may also require a solution vetting process. The state PAC chairperson may require more complex distribution street and line projects to complete a distribution design review prior to state PAC approval.

4.5 Preliminary Engineering

Once the project team has chosen a preferred solution with scope definition, it can proceed with preliminary engineering and development of an updated cost estimate of the preferred solution. In order to receive full funding approval, projects will require planning grade (+/-25%) cost estimates. The project team should request support from the Cost Estimating team to develop the planning grade cost estimate. The preliminary engineering phase will typically include:

- General requirements/specifications
- Preliminary design for civil, electrical, T-Line, and P&C
- Nomenclature, relay, metering, and equipment rating one-line diagram and preliminary threeline diagram
- More in-depth constructability review
- Below grade investigation
- Preliminary outage plan and Operations review
- Preferred route selection
- Equipment specifications and Bill of Materials
- Critical Path Schedule
- The project team will work with the affected groups listed in Section 2 to complete more indepth investigations, develop a mitigation plan for project risks, and refine project strategies

The Engineering Deliverables document which details activities required for estimating purposes can be found at <u>N:\Estimating-Shared\2</u>) Estimate Templates\4) Estimate Categories & Scope Deliverables\.

If the initial funding is not sufficient to complete preliminary engineering and develop a planning grade cost estimate, then the project team can prepare a PAF and make a request for partial funding at EPAC per Section 3.5. The partial funding request should be for the budget amount that will be required to complete the detailed scope definition of the project and prepare a full funding request. As with IFRs, partial funding requests may include a budget for internal siting and permitting preparation activities but should not include funding for procurement of any material. The request should also include a proposed schedule to complete these activities and return to EPAC with a full funding request.

Docket No. DE 19-057

4.6 Full Project Authorization

After preliminary engineering is complete, the PAF will be completed and the project will be presented to either the EPAC or the state PAC for full approval and funding authorization. PAFs that will be reviewed at EPAC should be submitted to <u>TranEPAC@eversource.com</u> at least seven business days prior to the next scheduled EPAC meeting. For the project types listed in Section 3.4.1, the EPAC will not review full funding requests unless the project has already been approved by the Solution Design Committee. The project checklist, a Constructability Review Form, and a detailed backup cost estimate as described in Section 4.4 in accordance with Attachment D to ISO-NE Planning Procedure 4 (PP4) must accompany the PAF.

4.6.1 Program Approval

EPAC will review and approve Asset Management programs using the Operations Program Level Project Authorization Form. The form can be found at<u>\\nu.com\data\SharedData\EPAC\Administrative\EPAC</u> Forms. In addition to the information required on the PAF for a regular project (need, objectives, scope, background/justification, etc.) the Program Level PAF will also require:

- A financial evaluation completed on a unit cost basis so that the capital cost of each application of the program can be fully understood. The unit cost is often based on a similar project that has been completed.
- A listing of proposed circuits or substations by state that will be included in the scope of the program.
- An estimate of the program capital investment value by state.
- A proposed schedule for bringing forward and executing the program level releases.
- A description of the investigations that will be needed at each location to develop the scope and cost estimate at a specific site.

As described in Section 4.1.1 Program Level PAFs may also be combined with an initial funding request at the program level so that the initiator will have funds to develop the scope of the program at specific sites and bring forward full funding program release requests.

4.6.2 Program Release Authorization

Once the scope, site-specific cost estimate, and constructability reviews are completed for a particular location or circuit, a Program Release Form will be submitted for full funding. The Program Release Form can be found at \\nu.com\data\SharedData\EPAC\Administrative\EPAC Forms\. Each Release will summarize the scope and cost estimate at a specific location and discuss any variances between the

Capital Project Approval Process - JA-AM-2001-A, Rev. 5

scope or cost estimates from the expected unit costs and scope approved in the Program Level PAF. Once an individual program release is approved at EPAC, any initial funding costs that were originally charged at the program level will be journaled to the specific project, which will allow those costs to be capitalized along with the specific project and also make more budget available at the program level to develop additional Program Release Forms. Once approved, the approval process for a Program Release Form will be the same as stated above for the full funding PAF.

Docket No. DE 19-057

Record Request 1-001 - At

4.6.3 Delegation of Authority

Once approved, the EPAC or state PAC administrator will submit the EPAC-approved PAF to Investment Planning for approvals in PowerPlan in accordance with the company Delegation of Authority Policy (DOA). The DOA specifies the capital authorization level of various company positions (manager, director, vice president, senior vice president / subsidiary president, Executive vice president, etc.). The MS Excel file "Power Plan Project Approval Trees" found at N:\EPAC\Administrative\ lists which specific individuals at each authorization level that will be required to approve projects authorized by EPAC. There are separate approval trees listed for transmission line and substation major projects, transmission line maintenance projects, and distribution substation projects. The full project funding is attained once delegation of authority has been performed through PowerPlan in accordance with APS01. PMs should include up to thirty days in project schedules to complete approvals in PowerPlan and sixty days for projects that will require Delegation of Authority approval by the Eversource Subsidiary Board.

Projects must be fully approved in PowerPlan before their scope or cost estimates can be shared publicly. This includes but is not limited to sharing cost estimates with ISO-NE, sharing cost estimates with customers for customer or interconnection projects, filing a siting or permitting application that includes a cost estimate, and conducting project outreach. If a project schedule requires the release of project information prior to full project approval in PowerPlan is possible, then a project team can request approval from EPAC to release the information. If EPAC approval is also not possible, then the project team can seek the SDC's approval to release the information.

4.7 Detailed Engineering, Siting, and Permitting

Once the project is fully authorized in PowerPlan, the project team can proceed with detailed engineering, siting and permitting application filings, project outreach, ordering major material, and other development activities.

4.8 Construction and Construction Variance Monitoring

The project manager or lead will manage the project's execution and construction. The project manager or lead will monitor spend vs. authorized costs and submit a revised PAF or Supplemental Request Form (SRF) to the EPAC or state PAC if any of the following occur:

- The project cost will exceed APS01 tolerances.
- Significant Scope change (even if cost alone does not trigger a supplement) such as an added unit of property (i.e. switches, relays, CCVTs, etc.) or a change in technology

• Technical Design Change (i.e. OH vs UG, air vs. GIS, etc.)

A revised PAF can be used for scope changes without significant cost changes and the SRF should be submitted for all other instances of project cost being expected to exceed APSO1 tolerances. Supplemental authorization requests should be prepared as soon as it is likely that the project cost is expected to increase and the updated project estimate exceeds the APSO1 tolerance for the current authorization. Supplement requests should also be submitted once a scope change is identified. The SRF can be found at <u>\\nu.com\data\SharedData\EPAC\Administrative\EPAC Forms</u>.

If a supplement is approved by the EPAC or state PAC, the committee administrator will send the approved SRF to Investment Planning for submittal for Delegation of Authority approvals in PowerPlan. When determining when to submit a supplement, PMs should note that attaining full approval in PowerPlan may take up to thirty days and sixty days for projects that will require Delegation of Authority approval by the Eversource Subsidiary Board.

4.9 Project Closeout

All project documents will be closed and affected databases updated upon project closeout in accordance with <u>M6-PM-2001</u>, Project Management Process, or applicable local project closeout process.

5 Instructions for Small Planned Projects

Each year annual distribution substation budgets are approved and funded to support the many small planned projects that will be completed that year. Per APS01, transmission projects less than or equal to \$300,000 in total cost and distribution substation projects less than or equal to \$100,000 in direct costs do not require their own PAFs.

5.1 Distribution Substation Projects Less Than or Equal to \$50,000 in Direct Cost

To be issued a work order that will charge against one of these annual budgets for a small planned distribution substation project, the project lead must complete a Planned Annual Request Form which can be found at <u>\\nu.com\data\SharedData\EPAC\Administrative\EPAC Forms</u>. The completed Planned Annual Request Form is then attached in PowerPlan when a new work order is created with an EPAC Administrator included as a required approver.

5.2 Transmission Projects Less Than or Equal to \$300,000 in Total Cost & Distribution Substation Projects with Direct Cost Over \$50,000 and up to \$100,000

To request project approval the project lead must complete a Planned Annual Request Form which can be found at <u>\\nu.com\data\SharedData\EPAC\Administrative\EPAC Forms</u>. The completed Planned Annual Request Form is then submitted to <u>TranEPAC@eversource.com</u>. The completed Planned Annual Request Form will be reviewed and approved directly in PowerPlan.

Capital Project Approval Process - JA-AM-2001-A, Rev. 5 Page **11**



6 Instructions for Emergent Work

Each year annual transmission and distribution substation budgets are approved in each region and funded to support the many small projects that classify as emergent work within that year. Per APS01, transmission projects less than or equal to \$300,000 in total cost and distribution substation projects less than or equal to \$100,000 in direct costs do not require their own PAFs. Emergent work refers to work that could not be planned that is completed to repair or replace capital equipment that broke or failed.

To be issued a work order that will charge against one of these annual budgets for small transmission or distribution substation emergent work, the project lead must complete an Emergent Work Order Request Form which can be found at <u>\\nu.com\data\SharedData\EPAC\Administrative\EPAC Forms</u>. The completed Emergent Work Order Request Form is then attached in PowerPlan when a new work order is created with an EPAC Administrator included as a required approver.

Annuals	Annuals refers to the annual project budgets that are approved to support small projects and small emergent work projects.	
APS	Eversource Accounting Policy Statement	
Conceptual Engineering	An optional project phase, for the engineering needed to obtain a project cost estimate accurate to -25%/+50% and to generate a PAF	
Conceptual Estimate	A cost estimate with target accuracy of -25% to +50%	
Construction	The project phase for the implementation of an engineered project	
DOA	Delegation of Authority	
Detailed Engineering	The project phase for the engineering needed for construction to begin, to obtain a project cost estimate accurate to \pm 10%.	
Emergent Work	Refers to work that could not be planned that is completed to repair or replace capital equipment that broke or failed	
Engineering Estimate	A cost estimate with target accuracy of +/-10%	
EPAC	Eversource Project Approval Committee	
IFR	Initial Funding Request Form required to initiate a project with funding and setup a Work Order, the initiator will complete an IFR and submit it to the EPAC.	
ISO-NE	The independent operator of New England's bulk electric power system and transmission lines. ISO-NE manages a comprehensive regional planning process.	
M2-TP-2018	The Project Alternative Strategy procedure document published by the System Planning organization.	
M6-PM-2001	The Project Management Process procedure document	

7 Definitions & Acronyms



PAF	Project Authorization Form required by Accounting Policy Statement 2 for the purpose of requesting authorization of capital funds for a particular project	
Planning Estimate	A cost estimate with target accuracy of +/-25%	
PM	Project Manager	
PowerPlan	Eversource financial approval tool	
PP4	ISO-NE Planning Procedure 4	
Preliminary Engineering	The project phase for the engineering needed to obtain a project cost estimate accurate to ± 25% and to generate a PAF	
Program Level PAF	Authorization document for programs. A program is a substation need that will be addressed at numerous sites (i.e. Oil Circuit Breaker Replacements, Relay Replacements, etc.) or a line need that will be addressed on numerous circuits (i.e. Structure Replacements, Fiber Optic Expansion, etc.)	
Program Release Form	Authorization form for a specific site or circuit of an approved program.	
SCLL	Single Contingency Loss of Load	
SDC	Solution Design Committee is a three-state committee that reviews substation and transmission projects and programs to ensure that the best solution is selected and standardization is implemented across the company	
SSF	Solution Selection Form – Document that the SDC will review and approve	
SRF	Supplement Request Form	
State PAC	State Project Approval Committee. There will be three state project approval committees for distribution projects: MPAC, CT PAC, and NH PAC	
WO	Work Order	

8 Revision History

Revision 5 – June 1, 2020

• Added Sections 4.1.1, 4.5.1, and 4.5.2 containing description and instructions for initiating programs, Program Level PAFs, and Program Release Forms

Docket No. DE 19-057

Record Request 1-001 - A

Capital Project Approval Process

- Added Sections 4.5.3 to add additional description of Delegation of Authority Policy
- Added Sections 5 and 6 to include instructions for securing authorization for emergent work and annual projects
- All Sections: Added detail and instructions for distribution line projects, distributed generation interconnection projects, and communications engineering projects.
- Other minor updates

Revision 4 – November 2, 2018

• Updated all sections to align with updated project lifecycle including new Project Initiation Process and Solution Design Committee Process

Revision 3

• Minor updates

Revision 2 – October 27, 2017

• All Sections: Changed from TRC and CPAC to EPAC and state PACs

Revision 1 – December 7, 2016

- 4 General Instructions Added location of forms
- 4.2 Detailed Engineering Approval Added requirement to complete TAF Transmission Checklist
- 5 Definitions and Acronyms Added acronyms used in Attachment F
- 6 Summary of Changes Added section
- Added Attachment F, TAF Transmission Checklist and Instructions

Revision 0 – August 28, 2016

Original issue



Attachment A, Solution Design Committee Charter

<u>Purpose</u>

The Solution Design Committee (SDC) will serve as solution development approval committee to ensure the best solution is selected, ensure guiding principles are followed, and drive standardization. SDC will review project alternatives, scope, and conceptual grade cost estimates during the solution vetting process.

Applicability

The SDC is responsible for solution selection review of electrical Transmission and Substation projects in all three states of the following types:

- System Planning Reliability & Capacity Projects
- Asset Management Programs (OPGW Programs, Breaker Programs, etc.), Rebuilds, Conductor/Cable Replacements, Program releases with significant scope in addition to the program.
- Transmission Interconnection Projects Projects on track to sign Interconnection Agreements may be reviewed by the SDC at the request of the sponsoring engineering director.

Like-for-like asset replacement projects and individual releases within defined programs with minimal scope variations will not need to be reviewed or approved by the SDC. EPAC member directors will also have discretion to determine whether a specific project will require review and approval by the SDC.

Objectives

The objectives of the SDC are as follows:

- 1. Confirm that the right subject matter experts from affected departments were appropriately involved in the conceptual engineering, alternatives analysis, and solution selection.
- 2. Confirm project teams identified and considered a robust set of alternatives when selecting the best solution in accordance with M2-TP-2018 Project Alternative Process.
- 3. Ensure the development of project solutions and alternatives incorporate standardized design and equipment, where practical/possible.
- 4. Review initial conceptual engineering, scope, and cost estimates for all potential project alternatives. Cost estimates should be of conceptual grade (-25%/+50%) for the preferred solution and the leading alternative.
- 5. Review and confirm that project teams identify project risks for the preferred solution and its alternatives with the appropriate level of detail with respect to constructability, routing, outage planning, possible SCLLs, siting and permitting, environmental impacts, community and external stakeholder impacts, land rights needs and site control, procurement, etc.

- 6. Review and confirm project team's alternatives analyses and choice for preferred solutions and ensure the rationale is appropriately documented.
- 7. Coordinate with EPAC to initiate any needed process changes on at least a biennial basis.

Membership

SDC shall consist of an executive sponsor, a chairperson, voting members, an administrator, and nonvoting attendees as shown on the below table. The chairperson may designate additional voting members, if required.

SDC Role	Company Position	
Executive Sponsor	VP, Substation and Transmission Engineering	
Co-Chairperson	Director, Substation Design Engineering	
Co-Chairperson	Director, Substation Protection and Controls	
Administrator(s)	As appointed by the Chairperson	
Voting Member	Director, Transmission Business and Quality Assurance	
Voting Member	Director, System Planning	
Voting Member	Director, Transmission Line Engineering	
Voting Member	Director, Substation Technical Engineering	
Voting Member	Director, System Solutions	
Voting Member	Director, Engineering Capital Projects	
Voting Member	Manager(s), Transmission Projects	
Voting Member	Manager of Standards	
Voting Member	Manager of Transmission Siting	
Voting Member	Manager of Siting and Construction Services	
Attendee	Director, Transmission Project Controls	
Attendee	Director, Engineering Project Controls	
Attendee	Manager of Project Solutions	
Attendee	Manager of Estimating	
Attendee	Manager of Asset Management	
Attendee	Manager(s) of Substation Engineering	
Attendee	Manager(s) of Protection and Controls	
Attendee	Manager(s)/Lead(s) of Transmission Line and Civil Eng.	
Attendee	Manager(s) of Substation Technical Engineering	
Attendee	Manager(s) of System Planning	
Attendee	Manager of Licensing and Permitting	
Attendee	Manager(s) of Environmental Affairs	
Attendee	Manager(s) of Procurement	
Attendee	Supervisor(s)/Manager(s) of Outage and Ops Planning	
Attendee	Manager of Generation Interconnections	
Attendee	Manager of Operational Compliance	
Attendee	Manager(s) of Transmission Line Operations	
Attendee	Manager(s) of Station Operations/ Field Engineering/ System Dispatch	
Attendee	Manager(s) of Systems Engineering	
Attendee	Manager of ISO Policy and Economic Analysis	

SDC Membership List

Roles and Responsibilities

Executive Sponsor

- Provide senior management vision, direction and feedback to the SDC
- Appoint the Chairperson(s)

Chairperson(s)

- Preside at SDC meetings •
- Designate a Voting Member as an alternate to preside at meetings in his/her absence •

Docket No. DE 19-057

- Solicit Voting Member appointments
- Appoint a SDC administrator
- Determine the meeting schedule and location(s)
- Approve meeting agendas
- Review meeting materials on the agenda prior to the SDC meeting •
- Hold votes as required
- Participate in discussions and votes to meet the SDC objectives ٠
- Initiate the biennial review of the SDC process in coordination with EPAC
- Create subcommittees as required

Voting Member

- If required, designate a manager in the same organization as a voting alternate to participate in the SDC
- Review meeting materials on the agenda prior to the SDC meeting
- Participate in discussions and votes to meet the SDC objectives •
- Participate in the biennial review of the SDC process as required ٠

Administrator

- Schedule meetings •
- Prepare draft meeting agendas •
- Quality Screening of Project Documentation
- Distribute meeting materials to attendees five working days prior to a scheduled SDC meeting
- Record the result of any votes •
- Prepare and distribute meeting notes
- Record Solution Select Forms presented and their attachments and meeting results •
- Attend to and manage the SolutionDesignCommittee@eversource.com email inbox

Project Lead/Initiator

Complete a Solution Selection Form (including statement of need, project objectives, alternatives analysis, and scope for preferred solution) for any proposed capital project that meets the applicability criteria described above

> Capital Project Approval Process - JA-AM-2001-A, Rev. 5 Page **17**

- Ensure that SDC objectives listed above are fully met, and that subject matter experts from affected departments were included in the alternatives analysis.
- Submit the Solution Selection Form to the SDC administrator via <u>SolutionDesignCommitee@eversource.com</u> at least five working days prior to the next scheduled SDC meeting (ensures document screening and review by committee members)
- Attend the SDC meeting and present the Solution Selection Form to SDC members
- Revise the Solution Selection Form and/or respond to comments from the SDC as required

<u>Quorum</u>

The Chairperson(s) (or alternate) plus a minimum of four Voting Members (or alternates) shall constitute a quorum for voting purposes if all appropriate disciplines are present to challenge the merits of the project(s).

Meeting Schedule and Location

The SDC shall schedule meetings twice monthly. The Chairperson(s) may cancel a meeting or require more frequent meetings from time to time as required. The location of the SDC meeting will rotate between MA, CT, and NH.

Voting

The Voting Members and the Chairpersons, or their designated alternates, are eligible to vote. A vote is carried by a simple majority. Each person has one vote.

Subcommittees

The Chairperson may establish standing or ad hoc subcommittees as required to meet the objectives of the SDC. Subcommittees shall be chaired by a voting member of the SDC or their designated alternate.



Attachment B, Eversource Project Authorization Committee Charter <u>Purpose</u>

The Eversource Project Authorization Committee (EPAC) reviews and approves the technical and financial merits of Transmission and Substation projects, including the selection of preferred solutions that are consistent with Eversource priorities (e.g. safety, reliability, cost efficiency). The EPAC authorizes, monitors and adjusts capital expenditure and resources for projects; prioritizes projects for the capital program and defers projects based on budget and resource availability.

Applicability

The EPAC is responsible for the technical review and financial approval of electrical Transmission and Substation projects in all three states.

Objectives

The objectives of the EPAC are as follows:

- 1. Receive, review, and approve Initial Funding Request Forms
 - a. Review the need and confirm that a capital project is needed to address the need.
 - b. Review and approve the project's objectives.
 - c. Ensure the funding request amount, planned development activities, and schedule are appropriate.
- 2. Receive, review, and approve PAFs for all projects that meet the Accounting Policy Statement No. 1 threshold. A lower threshold may be imposed by the EPAC, if desired.
 - a. Ensure that the PAF justification is valid.
 - b. Review and approve the project's technical merits.
 - c. Ensure that all reasonable alternatives were evaluated and appropriately rejected.
 - d. Ensure the scope and cost estimates are reasonable to ± 25% for projects seeking full authorization.
 - e. The committee has the ability to review detailed engineering designs, ensuring the proposed work is in accordance with Eversource Standards, evaluate load implications, assess root cause / reliability and vet out all possible alternatives.
 - f. Not all projects presented are requesting funding and require a vote these projects will be noted "FOR DISCUSSION ONLY".
 - g. Ensure the PAF project checklist is complete.
 - h. Ensure the Constructability Review Form is complete
 - i. Ensure the financial analysis is reasonable to the accuracy appropriate to the project phase.
 - j. Ensure the project schedule is achievable and reasonable to the accuracy appropriate to the project phase
 - k. Ensure risks and mitigation plans are identified.
- 3. Evaluate project funding and priorities relative to the five-year capital plan.

Capital Project Approval Process - JA-AM-2001-A, Rev. 5

- 4. Ensure project approval statuses and DOA progress are reviewed at least monthly.
- 5. Prioritize projects for deferment or cancellation.
- 6. Review EPAC process performance and lessons learned and coordinate with the state PACs to initiate any needed changes on at least a biennial basis.

Membership

EPAC shall consist of an executive sponsor, a chairperson, voting member directors, an administrator, and non-voting attendees as shown on the below table. The chairperson may designate additional voting member directors, if required.

EPAC Role	Company Position	
Executive Sponsor	VP, Transmission Projects	
Co-Chairperson	Director, Transmission Project Controls	
Co-Chairperson	Director, Transmission Business and Quality Assurance	
Administrator	EPAC Program Manager	
Member Director	Director(s), Transmission Projects	
Member Director	Director, Transmission Line Engineering	
Member Director	Director, Substation Design Engineering	
Member Director	Director, Substation Technical Engineering	
Member Director	Director, Substation Protection and Controls	
Member Director	Director, Transmission System Planning	
Member Director	Director, Siting and Compliance	
Member Director	Director, Investment Planning	
Member Director	Director(s), Engineering	
Member Director	Director, Reliability, Compliance and Implementation	
Member Director	Director(s), Transmission/System Ops	
Member Director	Director, System Operations	
Member Director	Director(s), Field Operations Lines	
Member Director	Director(s), Field Operations Substations	
Member Director	Director(s), Field Engineering	
Member Director	Director, Engineering Project Controls	
Member Director	Director, Engineering Capital Projects	
Attendee	Manager of Project Solutions	
Attendee	Manager of Transmission Siting	
Attendee	Manager of Siting and Construction Services	
Attendee	Manager of Capital Program & Estimating	
Attendee	Manager of Licensing and Permitting	
Attendee	Manager(s) of Procurement	
Attendee	Manager(s) of Substation Engineering	
Attendee	Manager(s) of Protection and Controls	
Attendee	Manager(s)/Lead(s) of Transmission Line and Civil Eng.	
Attendee	Program Manager- Transmission Capital Program	
Attendee	Supervisor(s)/Manager(s) of Outage and Ops Planning	
Attendee	Manager of Standards	

EPAC Membership List



Attendee	Manager of Budget and Investment	
Attendee	Manager of Generation Interconnections	
Attendee	Manager of Asset Management	
Attendee	Manager of Operational Compliance	
Attendee	Manager(s) of Line Operations	
Attendee	Manager(s) of Substation Technical Engineering	
Attendee	Manager(s) of System Planning	

Roles and Responsibilities

Executive Sponsor

- Provide senior management vision, direction and feedback to the EPAC
- Appoint the Chairperson(s)

Chairperson(s)

- Preside at EPAC meetings
- Designate a Member Director as an alternate to preside at meetings in his/her absence
- Solicit Member Director appointments from the leadership team
- Appoint a EPAC administrator
- Determine the meeting schedule and location(s)
- Approve meeting agendas
- Review meeting materials on the agenda prior to the EPAC meeting
- Hold votes as required
- Participate in discussions and votes to meet the EPAC objectives
- Initiate the biennial review of the EPAC process in coordination with the other EPACs
- Create subcommittees as required

Member Director

- If required, designate a manager in the same organization as a voting alternate to participate in the EPAC
- Review meeting materials on the agenda prior to the EPAC meeting
- Participate in discussions and votes to meet the EPAC objectives
- Participate in the biennial review of the EPAC process as required

<u>Administrator</u>

- Schedule meetings
- Prepare draft meeting agendas
- Quality Screening and Quality Measurement of Project Documentation.
- Distribute meeting materials to attendees three working days prior to a scheduled EPAC meeting
- Record the result of any votes
- Prepare and distribute meeting notes

Capital Project Approval Process - JA-AM-2001-A, Rev. 5

- Record PAFs and SRFs presented and meeting results
- Submit PAFs and SRFs approved to Investment Planning for Delegation of Authority approvals in PowerPlan

Docket No. DE 19-057

Capital Project Approval Process

• Attend to and manage the <u>TranEPAC@eversource.com</u> email inbox

Project Lead/Initiator

- Complete a PAF (including financial and technical details, cost estimate, project checklist, and Constructability Review Form) for any proposed capital project or change, ensuring that EPAC objective one items are fully met, and obtain any necessary reviews and approvals prior to submittal to the EPAC
- Submit the PAF to the EPAC administrator via <u>TranEPAC@eversource.com</u> at least seven working days prior to the next scheduled EPAC meeting for engineering approval (ensures document screening and review by committee members)
- Attend the EPAC meeting and present the PAF to EPAC members
- Revise the PAF and/or respond to comments from the EPAC as required
- Once fully authorized, if costs exceed the approved PAF levels by more than the amounts shown in Accounting Policy Statement No. 1, create a SRF, attach to the previously approved PAF, and resubmit to EPAC for review and approval.

<u>Quorum</u>

The Chairperson(s) (or alternate) plus a minimum of four Member Directors (or alternates) shall constitute a quorum for voting purposes if all appropriate disciplines are present to challenge the merits of the project(s).

Meeting Schedule and Location

The EPAC shall schedule meetings twice monthly. The Chairperson(s) may cancel a meeting or require more frequent meetings from time to time as required.

Voting

The Member Directors and the Chairpersons, or their designated alternates, are eligible to vote. A vote is carried by a simple majority. Each person has one vote.

Subcommittees

The Chairperson may establish standing or ad hoc subcommittees as required to meet the objectives of the EPAC. Subcommittees shall be chaired by a voting member of the EPAC or their designated alternate.



Attachment C, State Project Approval Committee (State PAC) Charter <u>Purpose</u>

The State Project Approval Committees (State PACs) review and challenge the technical merit of proposed distribution projects, and approve them as consistent with Eversource priorities (e.g. safety, reliability, cost efficiency).

Applicability

This charter applies to the three state PACs in Connecticut, Massachusetts and New Hampshire that are responsible for all Eversource electrical distribution projects originating in their respective states.

Objectives

The objectives of a state PAC are as follows:

- 1. Receive, review and approve Project Authorization Forms (PAFs) for all projects that meet the Accounting Policy Statement No. 1 threshold. A lower threshold may be imposed by the state PAC, if desired.
 - a. Ensure that the PAF justification is valid.
 - b. Review and approve the project's technical merits.
 - c. Ensure the scope and cost estimates are reasonable to \pm 25% for projects seeking full authorization and to -25%/+50% for projects seeking initial funding.
 - d. Ensure that all reasonable alternatives were evaluated and appropriately rejected.
 - e. The committee has the ability to review detailed engineering designs, ensuring the proposed work is in accordance with our Standards, evaluate load implications, assess root cause / reliability and vet out all possible alternatives.
 - f. Not all projects presented are requesting funding and require a vote these projects will be noted "FOR DISCUSSION ONLY".
 - g. Ensure risks and mitigation plans are identified.
 - h. Ensure the PAF project checklist is complete.
 - i. Ensure the Constructability Review Form is complete.
 - j. Ensure the financial analysis is reasonable to the accuracy appropriate to the project phase.
 - k. Ensure the project schedule is achievable and reasonable to the accuracy appropriate to the project phase.
 - I. If CEO or subsidiary board approval is required, ensure project and cost analysis has been reviewed by the Enterprise Risk Management and Financial Planning & Analysis departments.
- 2. Release engineering labor and funds for detailed engineering on approved PAFs.
- 3. Review projects authorized for detailed engineering at least monthly to control engineering spend.

- 4. Review state PAC process performance and lessons learned and coordinate with the other state PACs and the EPAC to initiate any needed changes on at least a biennial basis.
- 5. Provide a forum for design review for more complex distribution street and line projects. The state PAC chairperson will use their judgement to determine which projects require distribution design review prior to state PAC approval.

Membership

Each state PAC shall consist of an executive sponsor, a chairperson, voting member directors, an administrator and non-voting attendees as shown in the below table. The chairperson may designate additional voting member directors, if required.

State PAC Role	Company Position
Executive Sponsor	VP, Engineering
Chairperson	Director, Distribution Engineering
Administrator	Appointed by Chairperson
Voting Member	Manager, Distribution Engineering
Voting Member	Manager, Investment Planning
Voting Member	Manager, Distributed Generation
Voting Member	Manager/Supervisor, Field Engineering
Voting Member	Manager, Integrated Planning, Scheduling
Voting Member	Manager, System Operations
Voting Member	Manager, Field Operations
Voting Member	Manager, Substation Technical Engineering
Voting Member	Manager, Engineering Standards
Attendee	Project Manager(s)

State PAC Membership List

Roles and Responsibilities

Executive Sponsor

- Provide senior management vision, direction and feedback to the state PAC
- Appoint the Chairperson

Chairperson

- Preside at state PAC meetings
- Designate a Member Director as an alternate to preside at meetings in his/her absence
- Solicit Member Director appointments from the leadership team
- Appoint a state PAC administrator
- Determine the meeting schedule and location(s)
- Approve meeting agendas
- Review meeting materials on the agenda prior to the state PAC meeting

Capital Project Approval Process - JA-AM-2001-A, Rev. 5

- Hold votes as required
- Participate in discussions and votes to meet the state PAC objectives
- Release funds on approved PAFs for detailed engineering
- Initiate the biennial review of the state PAC process in coordination with the other state PACs

Docket No. DE 19-057

Record Request 1-001 - A

Capital Project Approval Process

- Create subcommittees as required
- Determine which projects should complete a design review prior to state PAC approval

Voting Member

- If required, designate a voting alternate to participate in the state PAC
- Review meeting materials on the agenda prior to the state PAC meeting
- Participate in discussions and votes to meet the state PAC objectives
- Participate in the biennial review of the state PAC process as required

<u>Administrator</u>

- Schedule meetings
- Prepare draft meeting agendas
- Distribute meeting materials to attendees three days prior to a scheduled state PAC meeting
- Record the result of any votes
- Prepare and distribute meeting notes
- Record PAFs presented and meeting results in the capital project database

Project Initiator (typically engineer level)

- Complete a PAF for any proposed capital project, ensuring that state PAC objective 1 items are fully met, and obtain any necessary reviews and approvals prior to submittal to the state PAC
- Submit the PAF to the state PAC administrator at least three working days prior to the next scheduled state PAC meeting for engineering approval
- Attend the state PAC meeting and present the PAF to state PAC members
- Revise the PAF and/or respond to comments from the state PAC as required
- Once fully authorized, if costs exceed the approved PAF levels by more than the amounts shown in Accounting Policy Statement No. 1, create a SRF, attach to the previously approved PAF, and resubmit for review and approval.

<u>Quorum</u>

The Chairperson(s) (or alternate) plus a minimum of two Member Directors (or alternates) shall constitute a quorum for voting purposes if all appropriate disciplines are present to challenge the merits of the project(s).

Meeting Schedule

Each of the state PACs shall schedule meetings at least bimonthly. The Chairperson may cancel a meeting or require more frequent meetings from time to time as required.



Voting

The Member Directors and the Chairperson, or their designated alternates, are eligible to vote. A vote is carried by a simple majority. Each person has one vote.

Subcommittees

The Chairperson may establish standing or ad hoc subcommittees as required to meet the objectives of the state PAC. Subcommittees shall be chaired by a voting member of the state PAC or their designated alternate.



Attachment D, Transmission and Substation Project Approval Process Flow Charts



Project Lifecycle Process - Conceptual Engineering through Project Approval:



Supplemental Authorization Process

(if required per APS guidelines)



PSNH dba Eversource Energy Docket No. DE 20-XXX Least Cost Integrated Resource Plan October 1, 2020 Appendix F-3 Page 29 of 32



Docket No. DE 19-057 Record Request 1-001 - Attachment 1

EVERS=URCE **Capital Project Approval Process**

Attachment E, Transmission and Substation Project Approval Process Detailed Flow Chart



Capital Project Approval Process - JA-AM-2001-A, Rev. 5 Page **28**

PSNH dba Eversource Energy Docket No. DE 20-XXX Least Cost Integrated Resource Plan October 1, 2020 Appendix F-3 Page 30 of 32

- 2. See Capital Project Approval Process JA-AM-2001-Ajob
- 3. TCA Process only required for reliability projects and asset condition projects >\$5M

Docket No. DE 19-057 Record Request 1-001

PSNH dba Eversource Energy Docket No. DE 20-XXX Least Cost Integrated Resource Plan October 1, 2020 Appendix F-3 Page 31 of 32

Attachment F, Distribution Project Approval Process Flow Chart

