

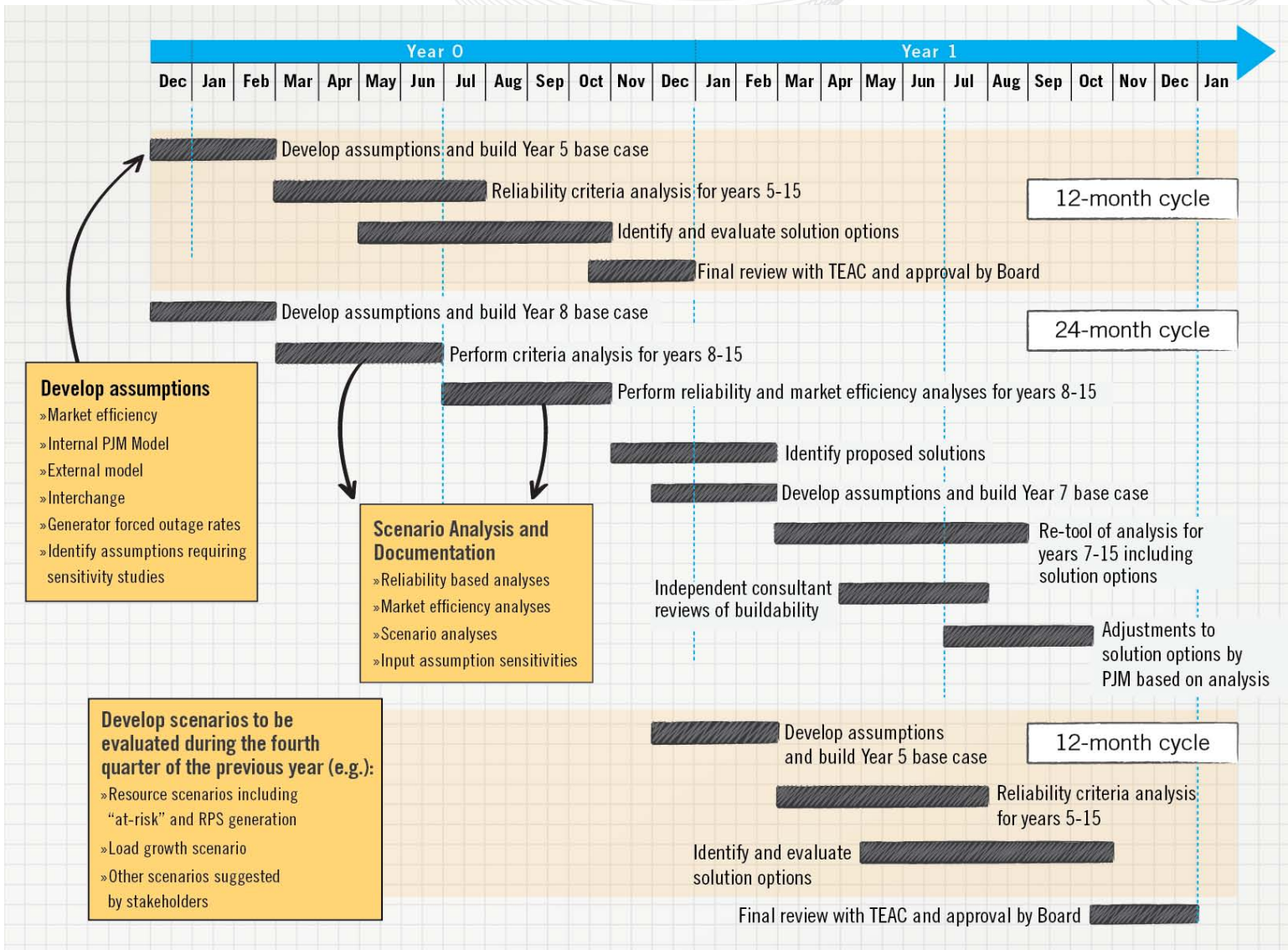
# Order 1000 Compliance Strawman

RPPTF  
June 29, 2012

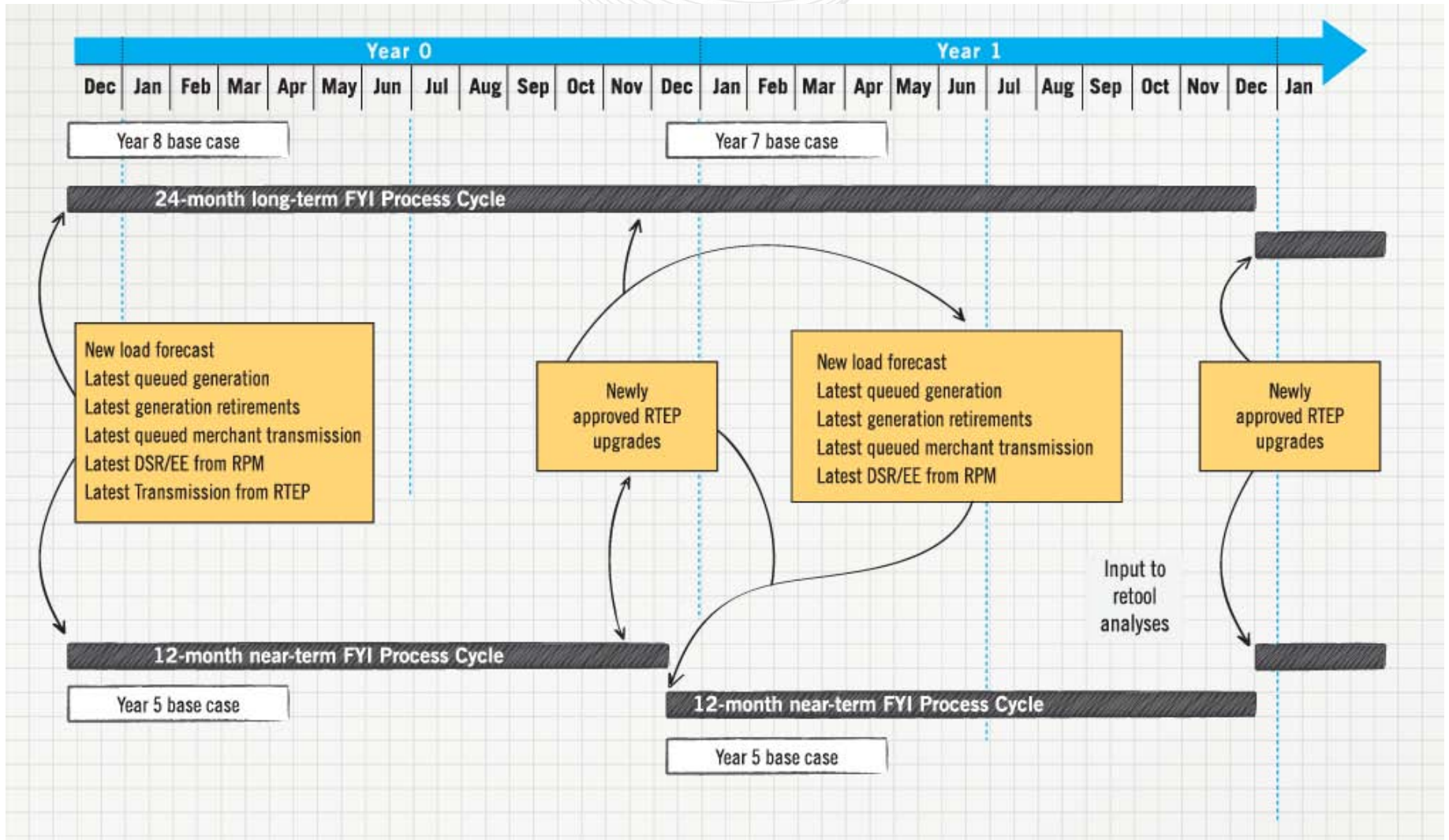
- ROFR reserved for incumbent Transmission Owners per Order 1000
  - Upgrades to existing facilities
  - Facilities in existing transmission owner ROW
  - Facilities within a zone whose costs are assigned to that single zone
  - Facilities that are not included in a TP's regional transmission plan for purposes of cost allocation

- 12-month cycle
  - Identifies short-term reliability needs
  - Re-examines previously approved projects based on changing conditions
  - Board approves 400 – 450 projects each year
  - Most projects are identified for years 4 and 5 of planning cycle
  
- 24-month cycle
  - Identifies market efficiency and longer-term reliability needs
  - Will include analysis of public policy needs
  - Targets reliability needs in year 7 and beyond

# 24 Month and 12 Month Planning Cycles



# 24 Month and 12 Month Planning Cycles



- Allow sufficient time for analysis of needs before proposal submission
- Provide advance signals to market to promote consideration of non-transmission solutions
- PJM planning process must look to identify optimal solutions – not just select among proposed projects
- Process cannot be allowed to impact timeliness of reliability solutions

- Transmission projects approved at end of 24-month cycle would need to be in service in 6 ½ years
  - or longer based on identified need date
- Producing more detailed results for year 10 would allow for greater consideration of non-transmission solutions
- 24-month cycle allows sufficient time for long-term analysis followed by a proposal window and an evaluation of solution options

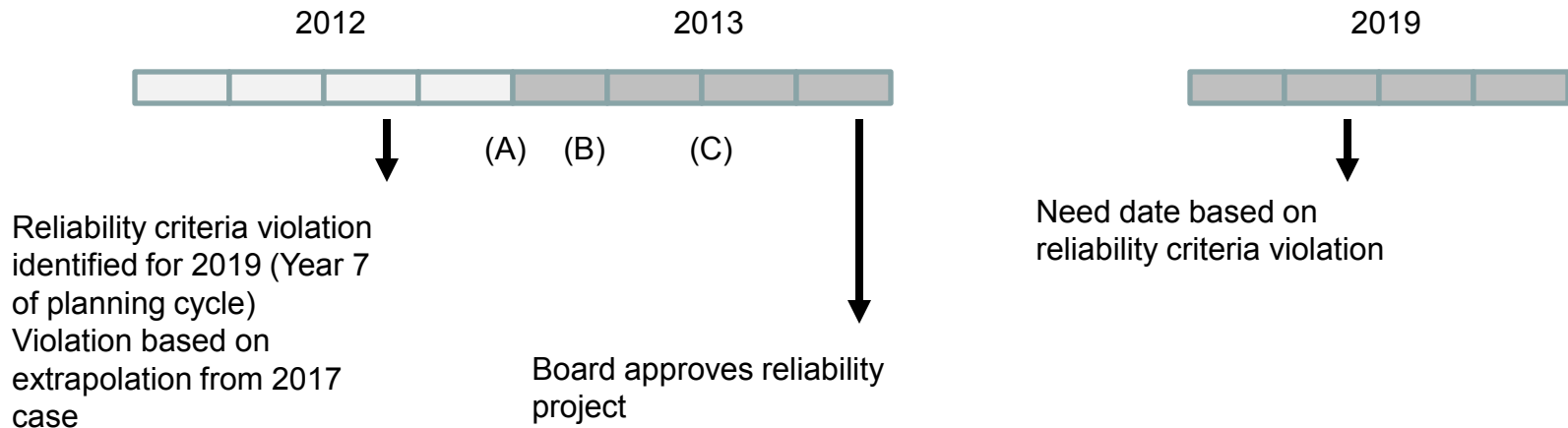
- Transmission projects approved at end of 12-month cycle would need to be in service in 4 ½ years
  - or less, 3 ½ years for Year 4 projects, 2 ½ years for Year 3 projects
- 12-month cycle does not allow sufficient time for a proposal window and iteration among solution options
  - Transmission solutions currently identified in the September – October timeframe each year



- 24-month cycle should allow for proposals for market efficiency, public policy, and long-term reliability needs
- 12-month cycle would only allow for proposals by mid-year to ensure that solutions are evaluated and approved by year-end

First identified in Year 7 – Expected in Year 5 in next cycle

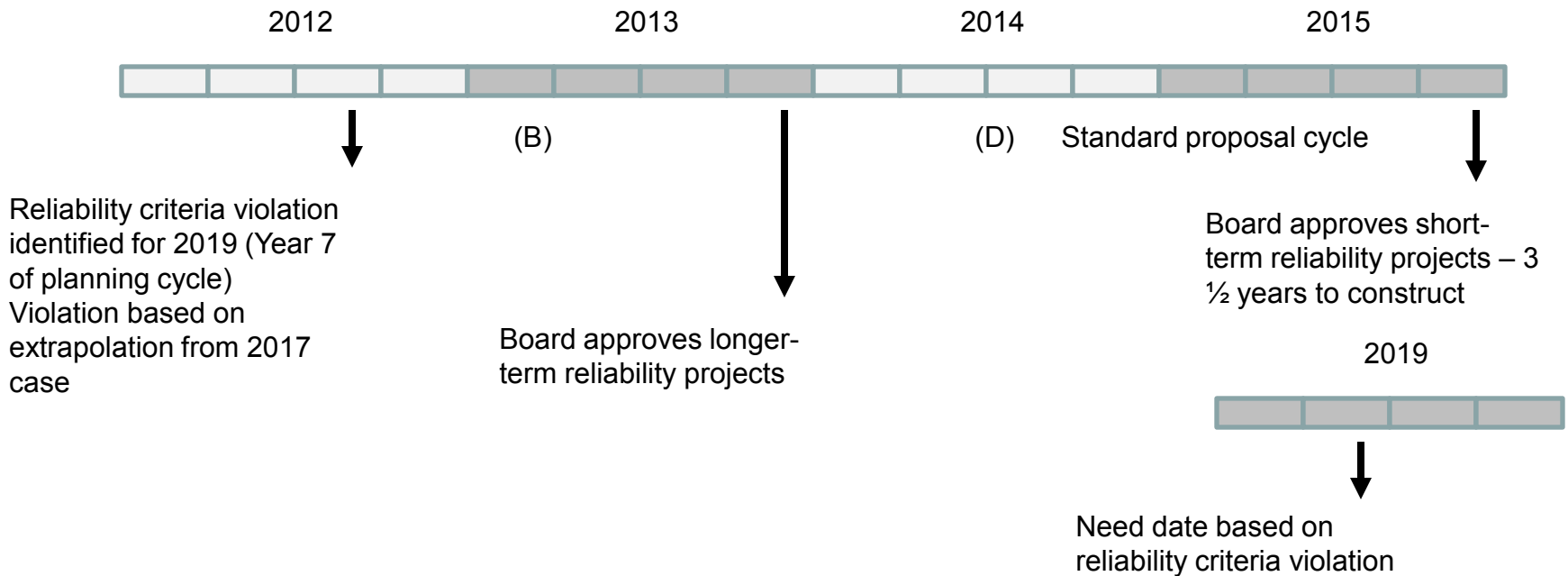
- Current 24-month cycle
  - Utilize proposal window (Nov – Feb) (A)
  - Update models in 2013 and re-validate 2019 criteria violations (now in Year 6) (B)
  - Evaluate proposed solutions, identify optimal solution (including adjusting proposed solutions or identifying new solution) (C)
  - Make recommendation to Board for approval before year end
  - Assign upgrade to constructing entity with approximately 5 ½ years to construct



First identified in Year 7 – Expected in Year 5 in next cycle

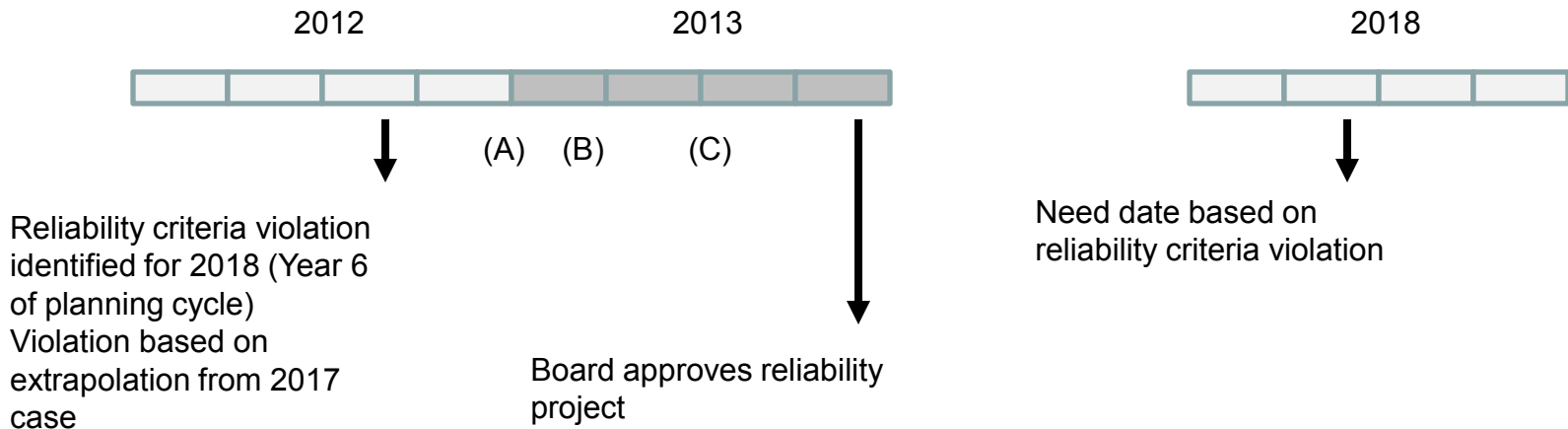
- Alternative

- Evaluate solution proposals in 2013 (now for Year 6) (B)
- Defer short-term solutions to 24-month cycle starting in 2014
- Re-evaluate violations in 2014 24-month cycle (for Year 5) (D)



First identified in Year 6 – Expected in Year 4 in next cycle

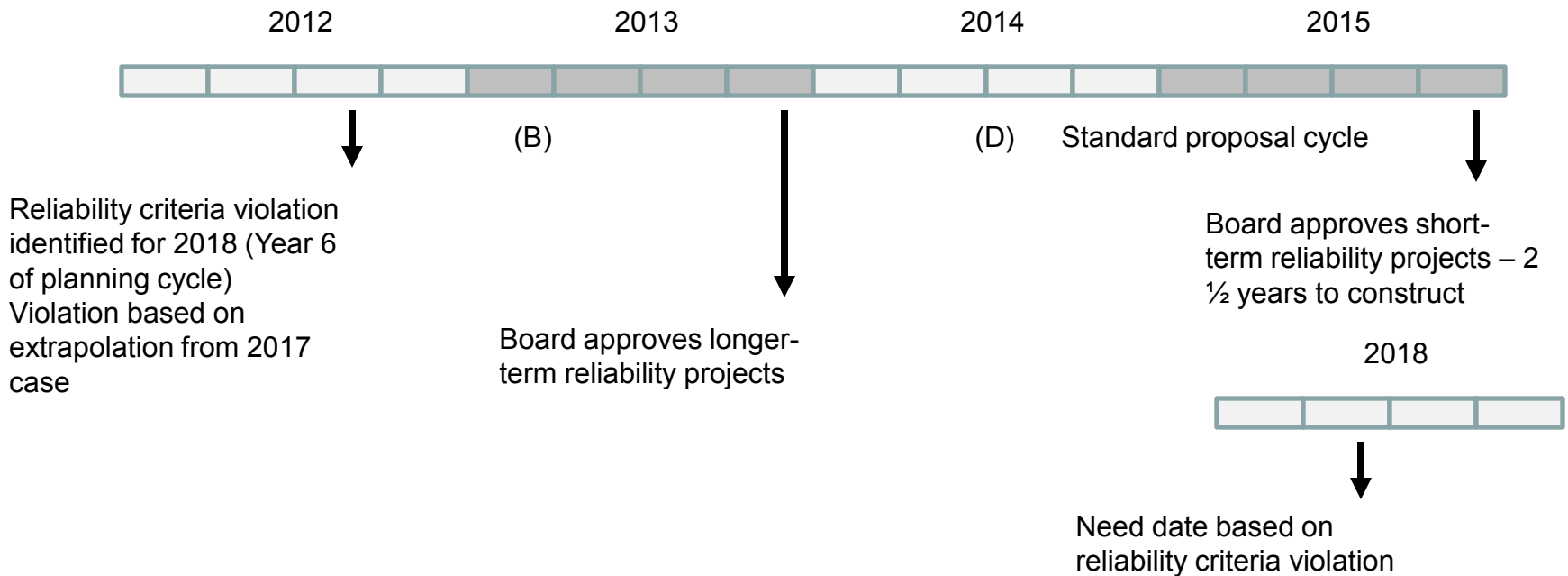
- Current 24-month cycle
  - Utilize proposal window (Nov – Feb) (A)
  - Update models in 2013 and re-validate 2018 criteria violations (now in Year 5) (B)
  - Evaluate proposed solutions, identify optimal solution (including adjusting proposed solutions or identifying new solution) (C)
  - Make recommendation to Board for approval before year end
  - Assign upgrade to constructing entity with approximately 4 ½ years to construct



First identified in Year 6 – Expected in Year 4 in next cycle

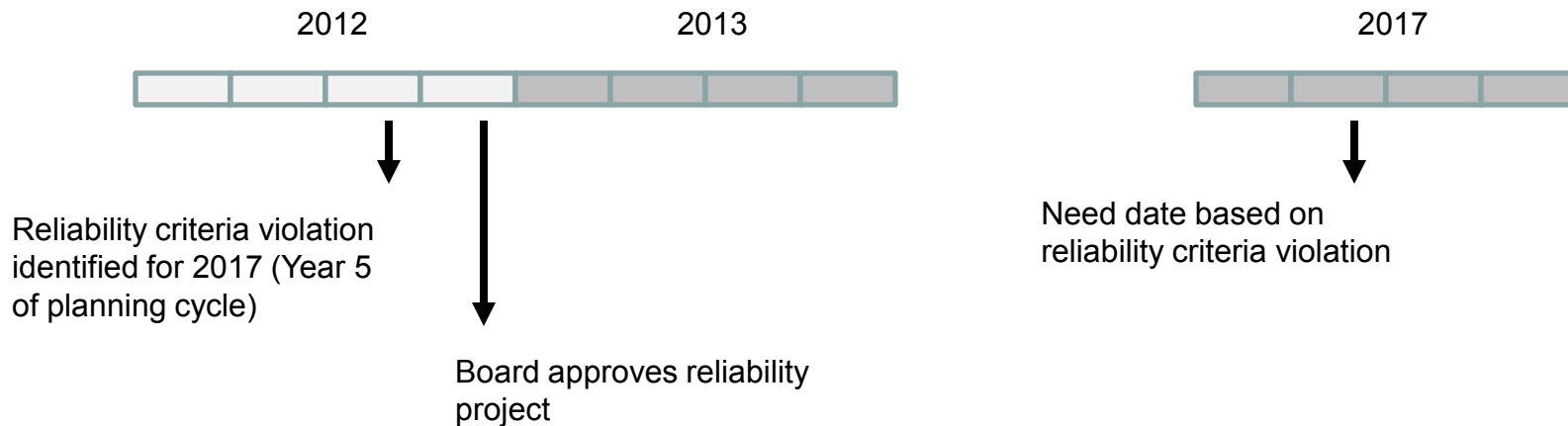
- Alternative

- Evaluate solution proposals in 2013 (now for Year 5) (B)
- Defer short-term solutions to 24-month cycle starting in 2014
- Re-evaluate violations in 2014 24-month cycle (for Year 4) (D)



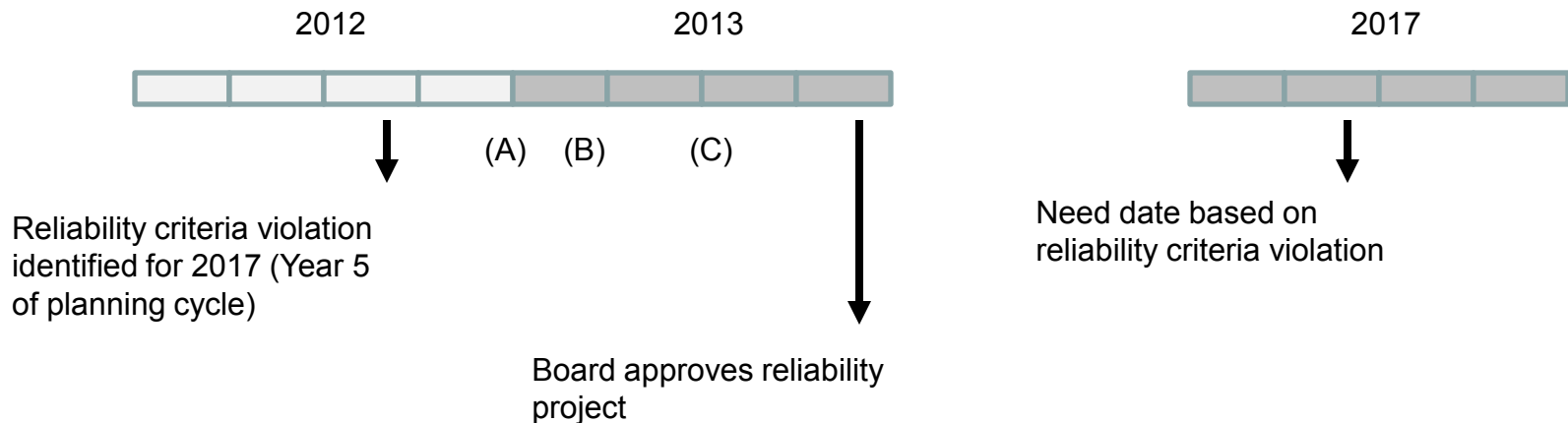
First identified in Year 5

- Current 12-month cycle
  - Identify and evaluate solution(s), identify optimal solution
  - Make recommendation to Board for approval before year end
  - Assign upgrade to incumbent TO with approximately 4 ½ years to construct



## First identified in Year 5

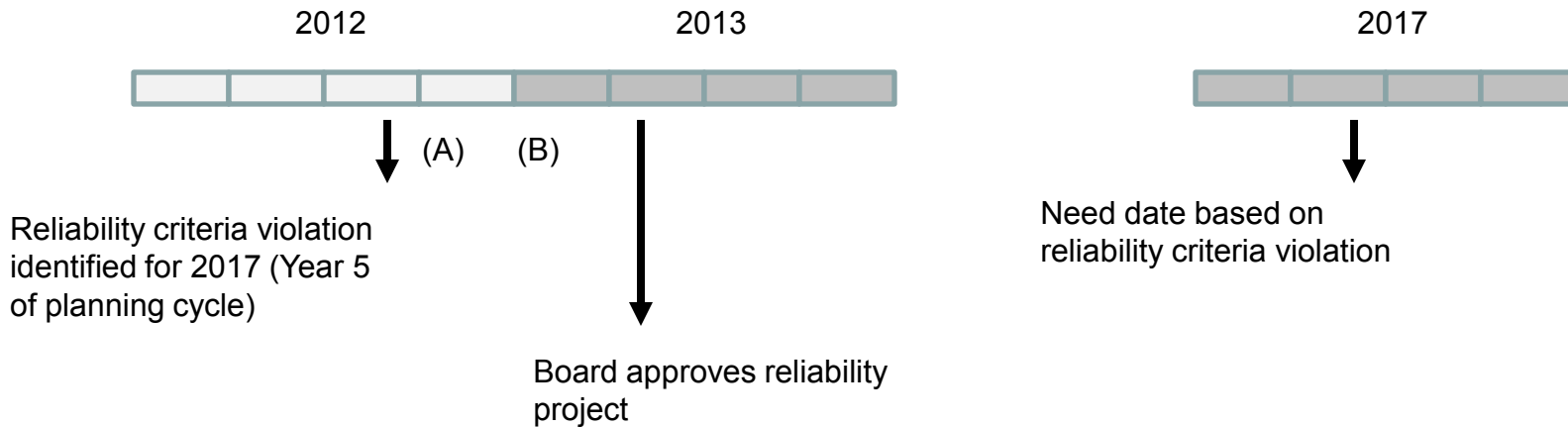
- Current 24-month cycle
  - Utilize proposal window (Nov – Feb) (A)
  - Update models in 2013 and re-validate 2017 criteria violations (now in Year 4) (B)
  - Evaluate proposed solutions, identify optimal solution (including adjusting proposed solutions or identifying new solution) (C)
  - Make recommendation to Board for approval before year end
  - Assign upgrade to constructing entity with approximately 3 ½ years to construct
  - Solutions not in 2013 5-year case for interconnection studies



## First identified in Year 5

- **Alternative**

- Utilize 12-month cycle with short proposal window (A) followed by evaluation and assignment to constructing entity (B)
  - Assuming no update to base case, Board approval at month 16 (approx. 4 years and 1 month to construct)
  - Solutions not in 2013 12-month cycle base case

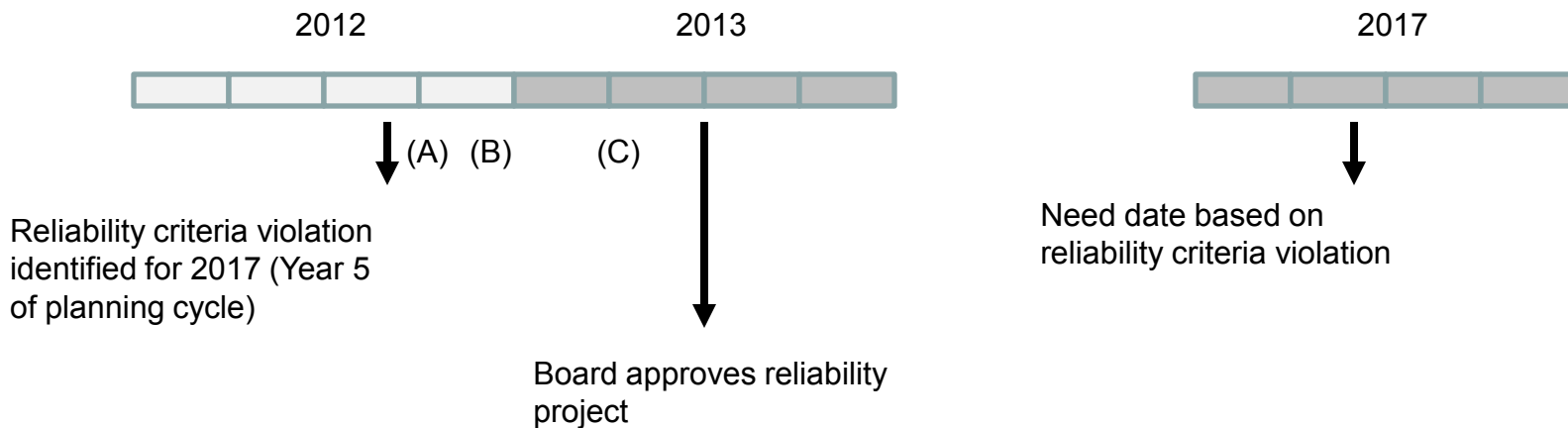




## First identified in Year 5

- Alternative

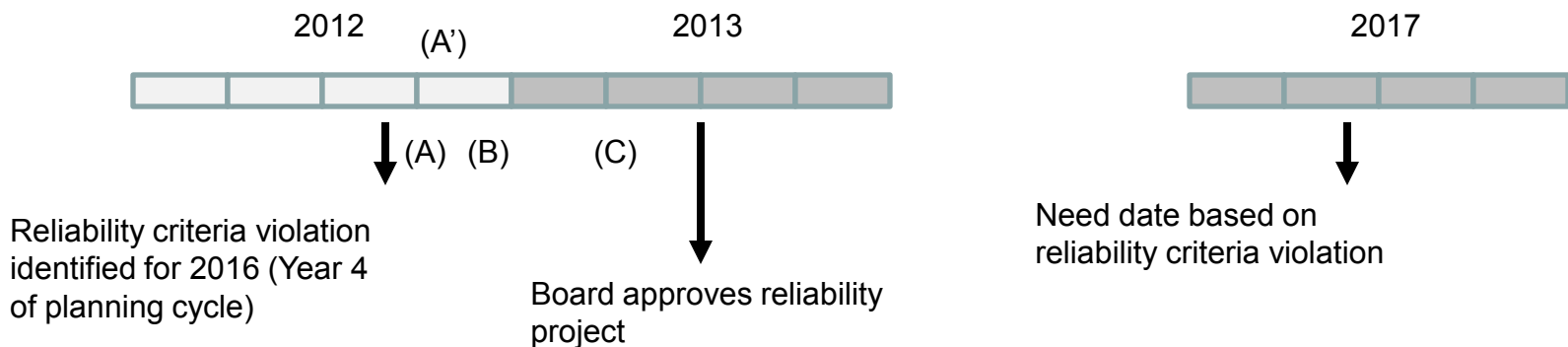
- Utilize 12-month cycle, TO identifies likely solution (backstop?) (A)
- Short proposal window for any projects that are not upgrades to existing infrastructure (B) followed by evaluation and assignment to constructing entity (C)
- Would have to evaluate infrastructure upgrades to ensure that they are most effective solution
- Could have situation where infrastructure upgrade doesn't solve violation and proposal window is delayed
- Assuming no update to base case, Board approval at month 18 (approx. 3 years and 11 months to construct)
- Solutions not in 2013 12-month cycle base case



## First identified in Year 5

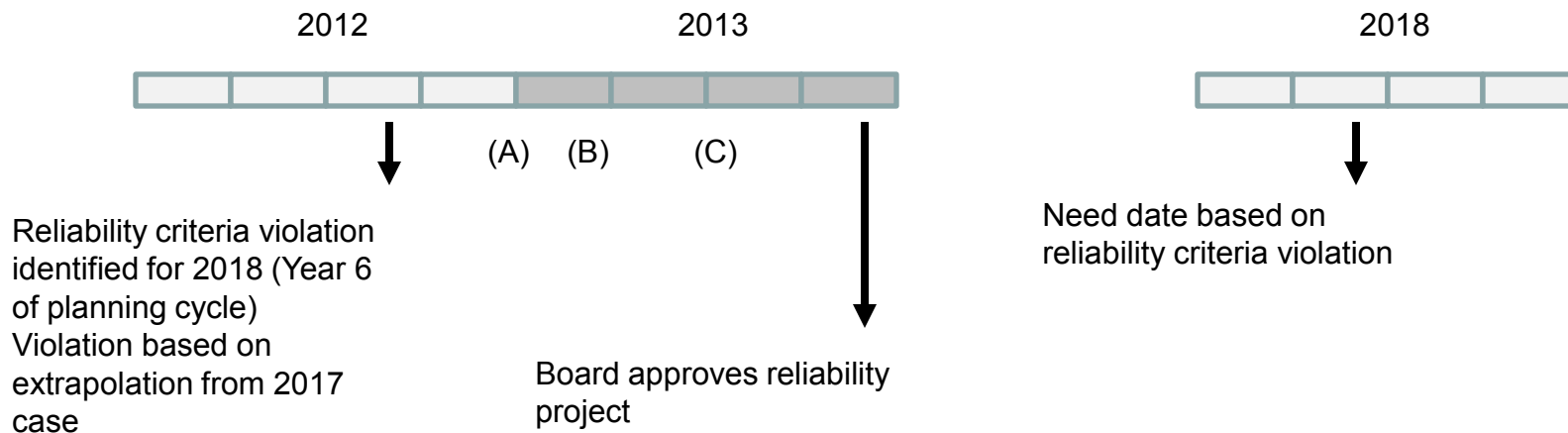
- Alternative

- Utilize 12-month cycle, TO identifies likely solution (backstop?) (A)
- Based on nature and timing of solution, PJM determines whether a proposal window is appropriate (A')
- If no, Board approval before year end, assign to incumbent, approx. 53 months to construct
- If yes, short proposal window for any projects that are not upgrades to existing infrastructure (B) followed by evaluation and assignment to constructing entity (C)
- Would have to evaluate infrastructure upgrades to ensure that they are most effective solution
- Could have situation where infrastructure upgrade doesn't solve violation and proposal window is delayed
- Assuming no update to base case, Board approval at month 18 (approx. 3 years and 11 months to construct)
- Solutions not in 2013 12-month cycle base case



First identified in Year 6 – Expected in Year 4 in next cycle

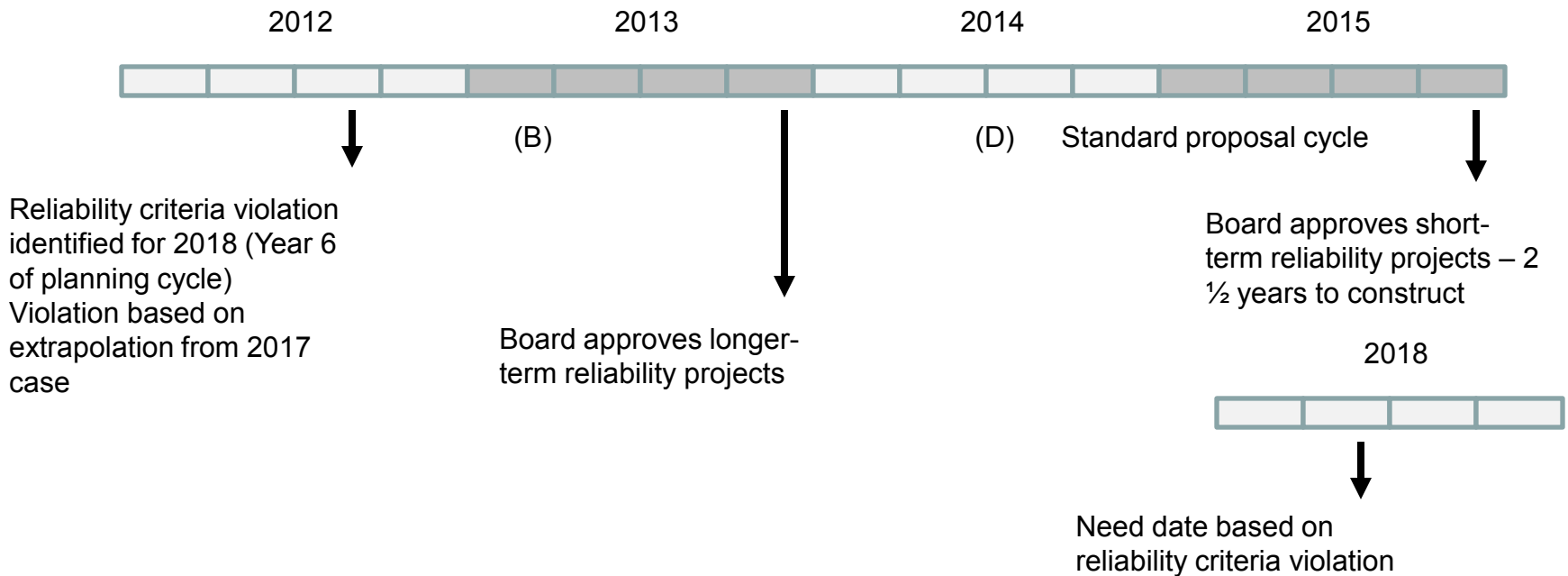
- Current 24-month cycle
  - Utilize proposal window (Nov – Feb) (A)
  - Update models in 2013 and re-validate 2018 criteria violations (now in Year 5) (B)
  - Evaluate proposed solutions, identify optimal solution (including adjusting proposed solutions or identifying new solution) (C)
  - Make recommendation to Board for approval before year end
  - Assign upgrade to constructing entity with approximately 4 ½ years to construct



First identified in Year 6 – Expected in Year 4 in next cycle

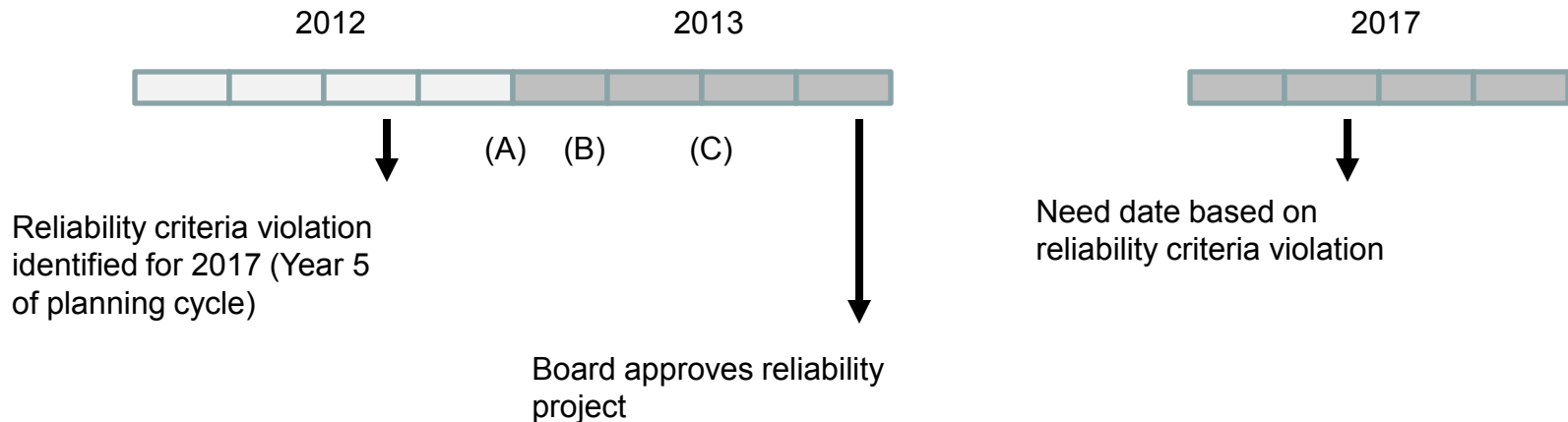
- Alternative

- Evaluate solution proposals in 2013 (now for Year 5) (B)
- Defer short-term solutions to 24-month cycle starting in 2014
- Re-evaluate violations in 2014 24-month cycle (for Year 4) (D)



First identified in Year 5 – Expected in Year 3 in next cycle

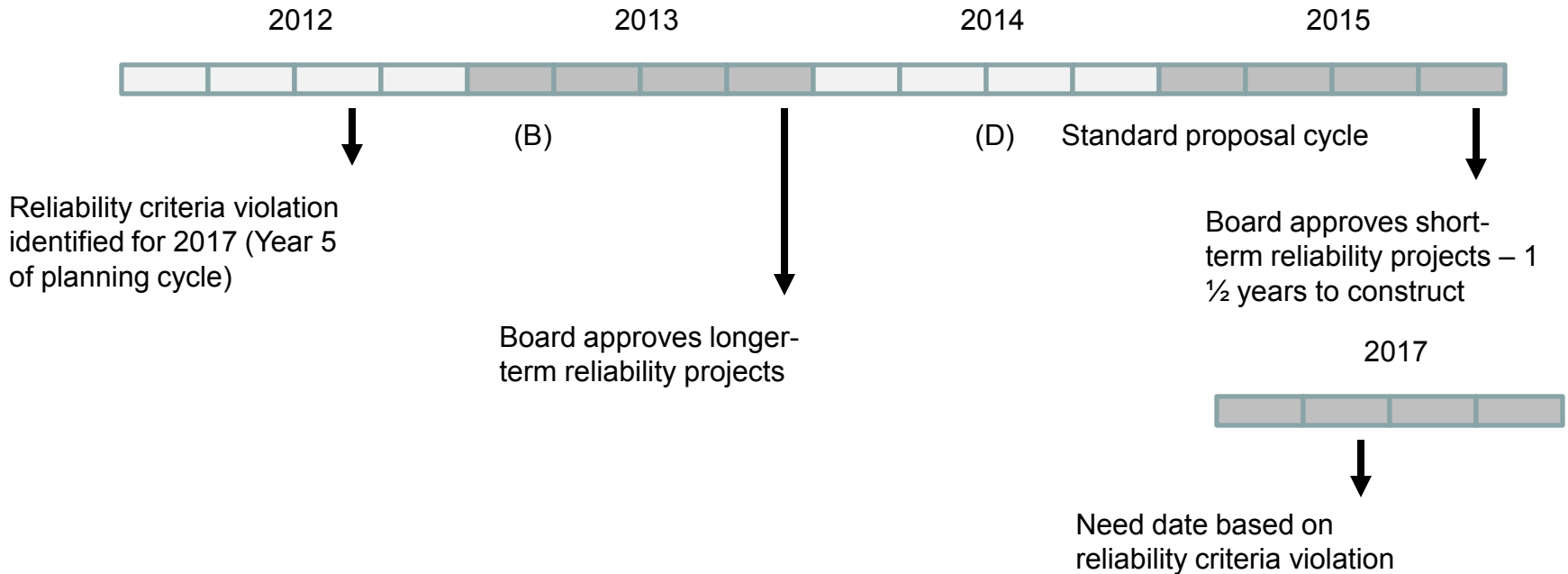
- Current 24-month cycle
  - Utilize proposal window (Nov – Feb) (A)
  - Update models in 2013 and re-validate 2017 criteria violations (now in Year 4) (B)
  - Evaluate proposed solutions, identify optimal solution (including adjusting proposed solutions or identifying new solution) (C)
  - Make recommendation to Board for approval before year end
  - Assign upgrade to constructing entity with approximately 3 ½ years to construct



First identified in Year 5 – Expected in Year 3 in next cycle

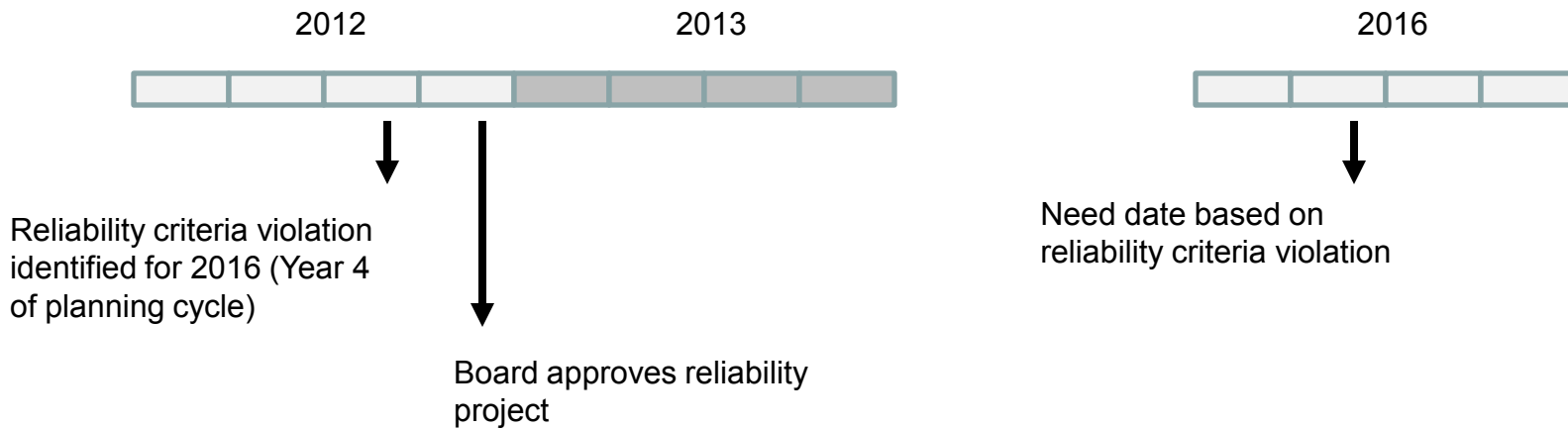
- Alternative

- Evaluate solution proposals in 2013 (now for Year 4) (B)
- Defer short-term solutions to 24-month cycle starting in 2014
- Re-evaluate violations in 2014 24-month cycle (for Year 3) (D)



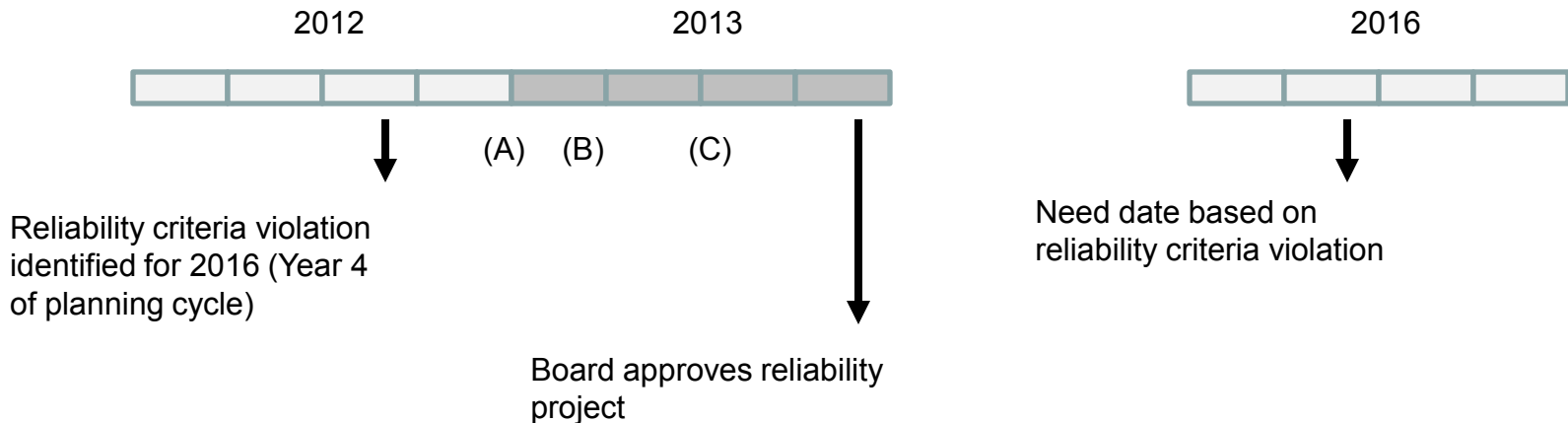
First identified in Year 4

- Current 12-month cycle
  - Identify and evaluate solution(s), identify optimal solution
  - Make recommendation to Board for approval before year end
  - Assign upgrade to incumbent TO with approximately 3 ½ years to construct



## First identified in Year 4

- Current 24-month cycle
  - Utilize proposal window (Nov – Feb) (A)
  - Update models in 2013 and re-validate 2016 criteria violations (now in Year 3) (B)
  - Evaluate proposed solutions, identify optimal solution (including adjusting proposed solutions or identifying new solution) (C)
  - Make recommendation to Board for approval before year end
  - Assign upgrade to constructing entity with approximately 2 ½ years to construct

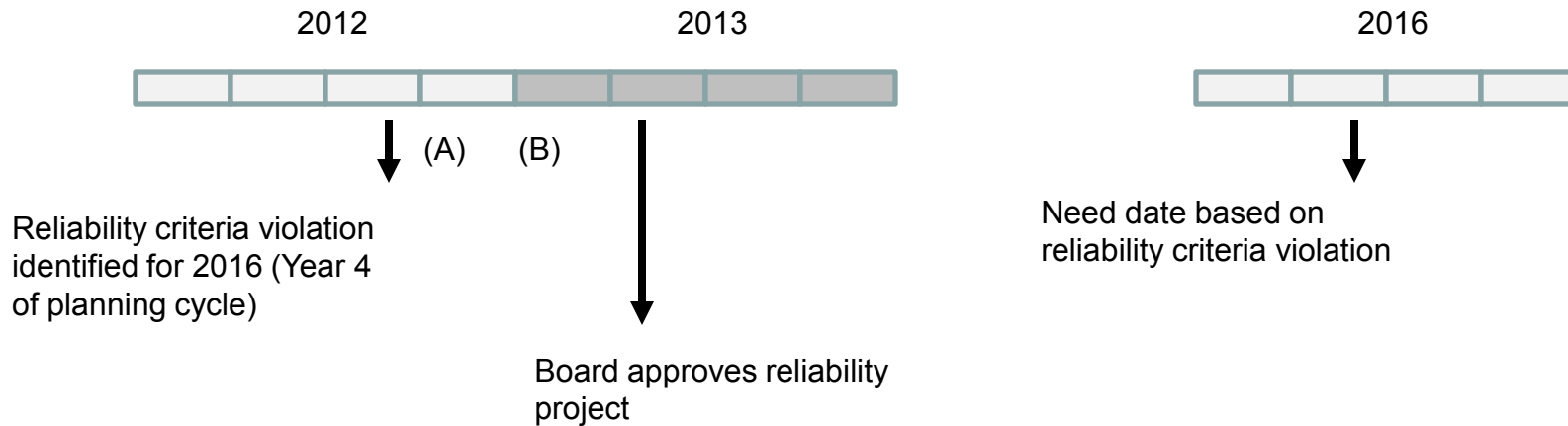




## First identified in Year 4

- Alternative

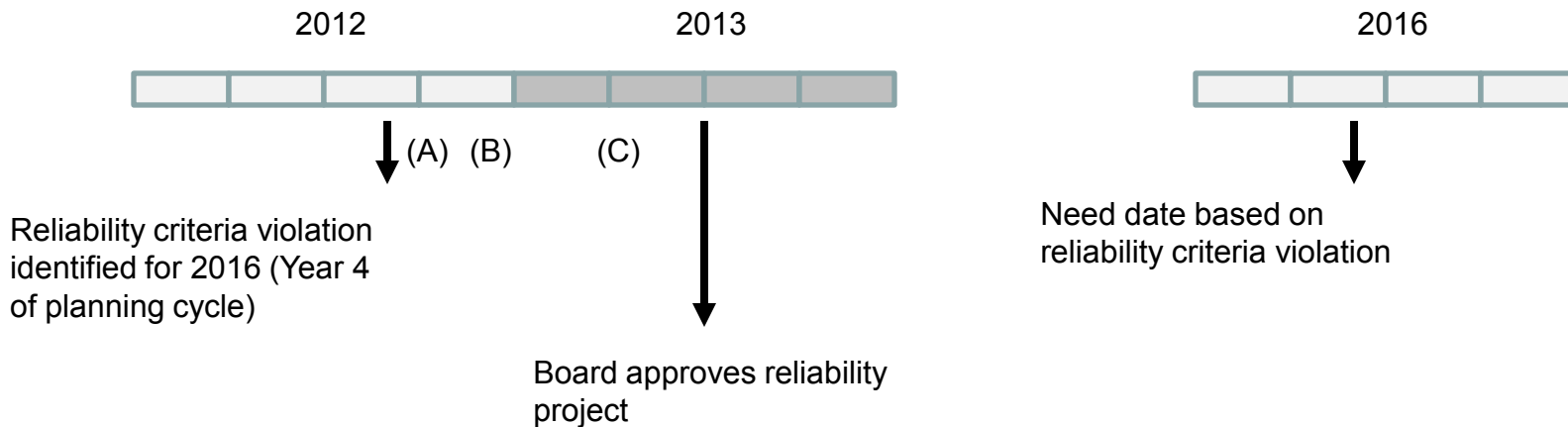
- Utilize 12-month cycle with short proposal window (A) followed by evaluation and assignment to constructing entity (B)
  - Assuming no update to base case, Board approval at month 16 (approx. 3 years and 1 month to construct)
  - Solutions not in 2013 12-month cycle base case



## First identified in Year 4

- Alternative

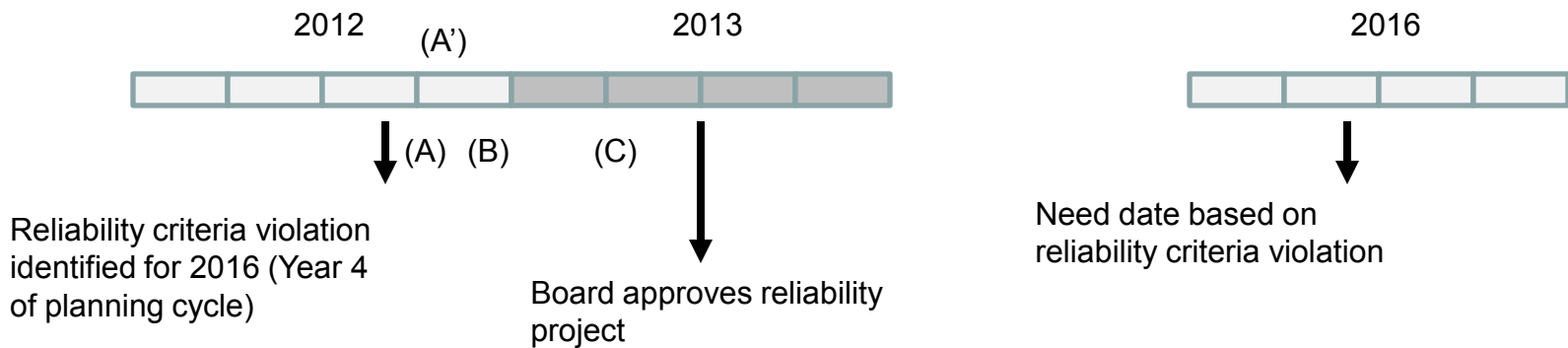
- Utilize 12-month cycle, TO identifies likely solution (backstop?) (A)
- Short proposal window for any projects that are not upgrades to existing infrastructure (B) followed by evaluation and assignment to constructing entity (C)
- Would have to evaluate infrastructure upgrades to ensure that they are most effective solution
- Could have situation where infrastructure upgrade doesn't solve violation and proposal window is delayed
- Assuming no update to base case, Board approval at month 18 (approx. 2 years and 11 months to construct)
- Solutions not in 2013 12-month cycle base case



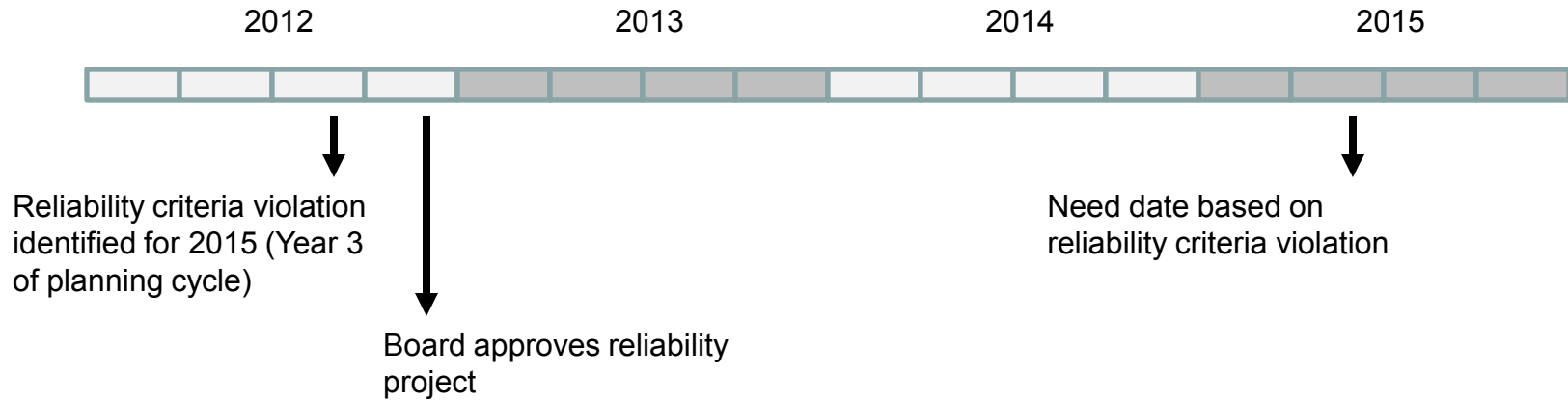
## First identified in Year 4

- Alternative

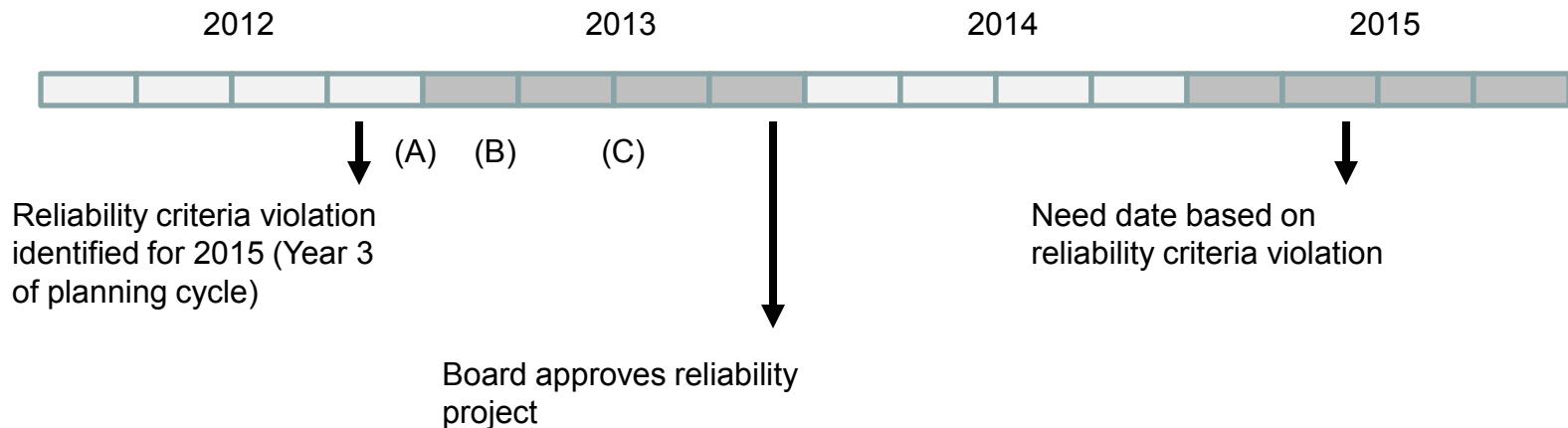
- Utilize 12-month cycle, TO identifies likely solution (backstop?) (A)
- Based on nature and timing of solution, PJM determines whether a proposal window is appropriate (A')
- If no, Board approval before year end, assign to incumbent, approx. 41 months to construct
- If yes, short proposal window for any projects that are not upgrades to existing infrastructure (B) followed by evaluation and assignment to constructing entity (C)
- Would have to evaluate infrastructure upgrades to ensure that they are most effective solution
- Could have situation where infrastructure upgrade doesn't solve violation and proposal window is delayed
- Assuming no update to base case, Board approval at month 18 (approx. 2 years and 11 months to construct)
- Solutions not in 2013 12-month cycle base case



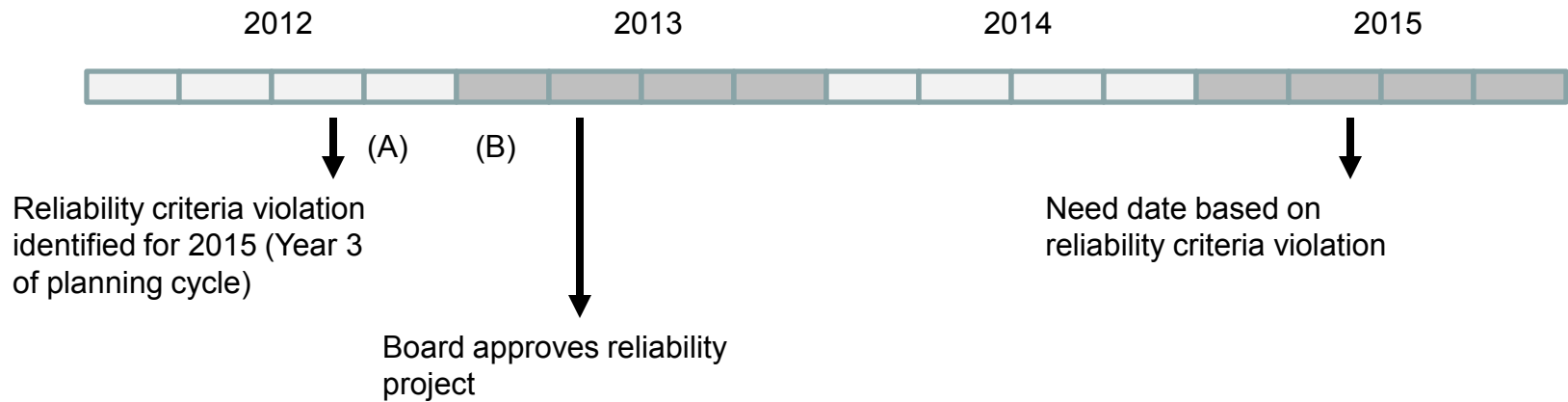
- Current 12-month cycle
  - Identify and evaluate solution(s), identify optimal solution
  - Make recommendation to Board for approval before year end
  - Assign upgrade to incumbent TO with approximately 2 ½ years to construct



- Current 24-month cycle
  - Utilize proposal window (Nov – Feb) (A)
  - Update models in 2013 and re-validate 2015 criteria violations (now in Year 2) (B)
  - Evaluate proposed solutions, identify optimal solution (including adjusting proposed solutions or identifying new solution) (C)
  - Make recommendation to Board for approval before year end
  - Assign upgrade to constructing entity with approximately 1 ½ years to construct

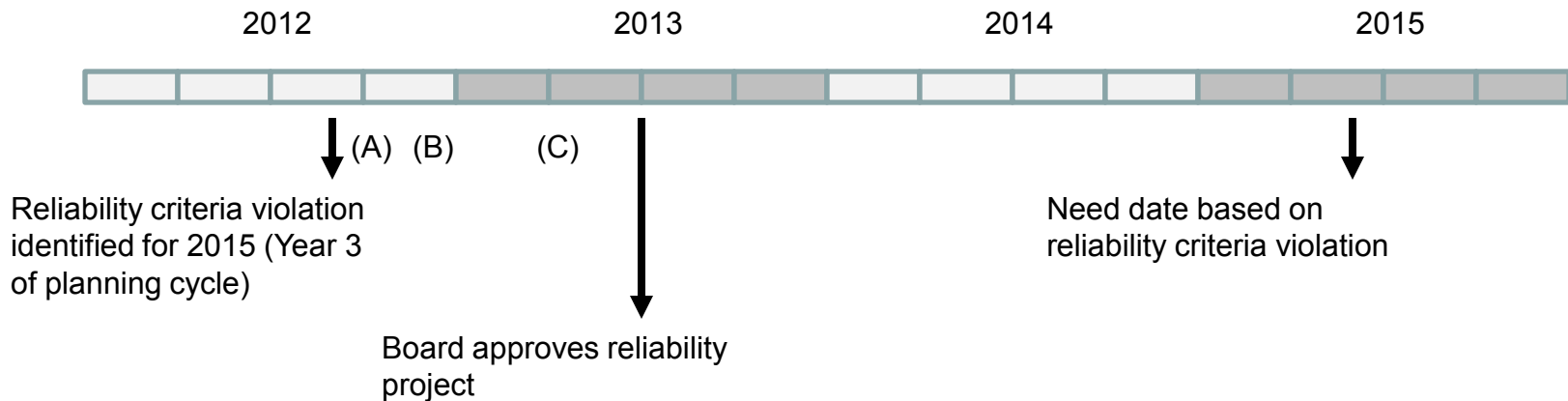


- Alternative
  - Utilize 12-month cycle with short proposal window (A) followed by evaluation and assignment to constructing entity (B)
    - Assuming no update to base case, Board approval at month 16 (approx. 25 months to construct)
    - Solutions not in 2013 12-month cycle base case

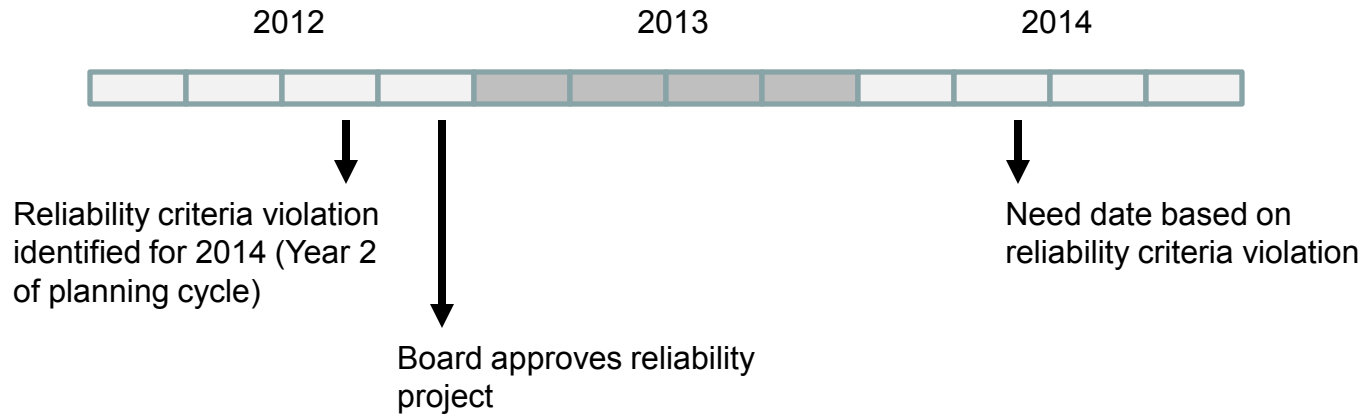


- Alternative

- Utilize 12-month cycle, TO identifies likely solution (backstop?) (A)
- Short proposal window for any projects that are not upgrades to existing infrastructure (B) followed by evaluation and assignment to constructing entity (C)
- Would have to evaluate infrastructure upgrades to ensure that they are most effective solution
- Could have situation where infrastructure upgrade doesn't solve violation and proposal window is delayed
- Assuming no update to base case, Board approval at month 18 (approx. 23 months to construct)
- Solutions not in 2013 12-month cycle base case

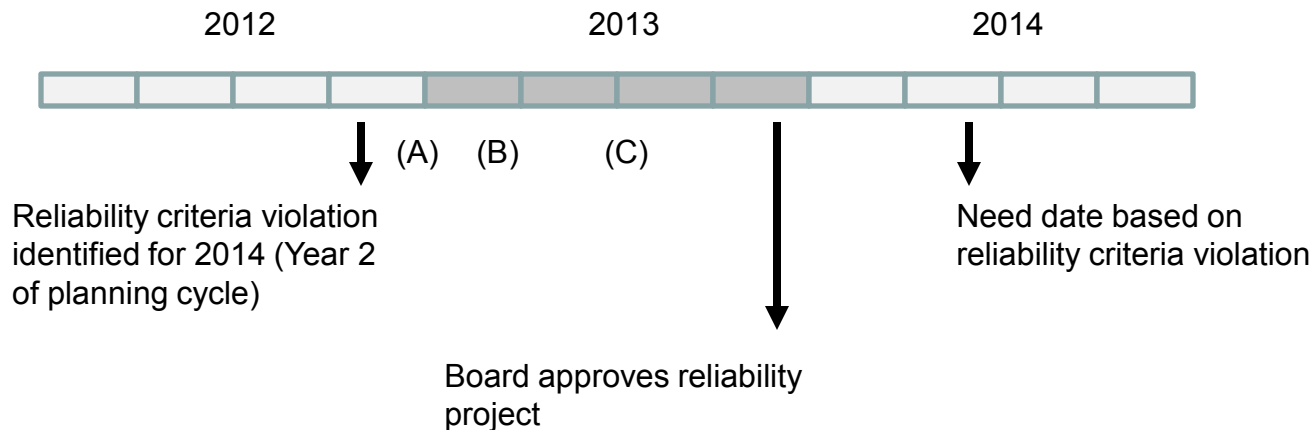


- Current 12-month cycle
  - Identify and evaluate solution(s), identify optimal solution
  - Make recommendation to Board for approval before year end
  - Assign upgrade to incumbent TO with approximately 1 ½ years to construct

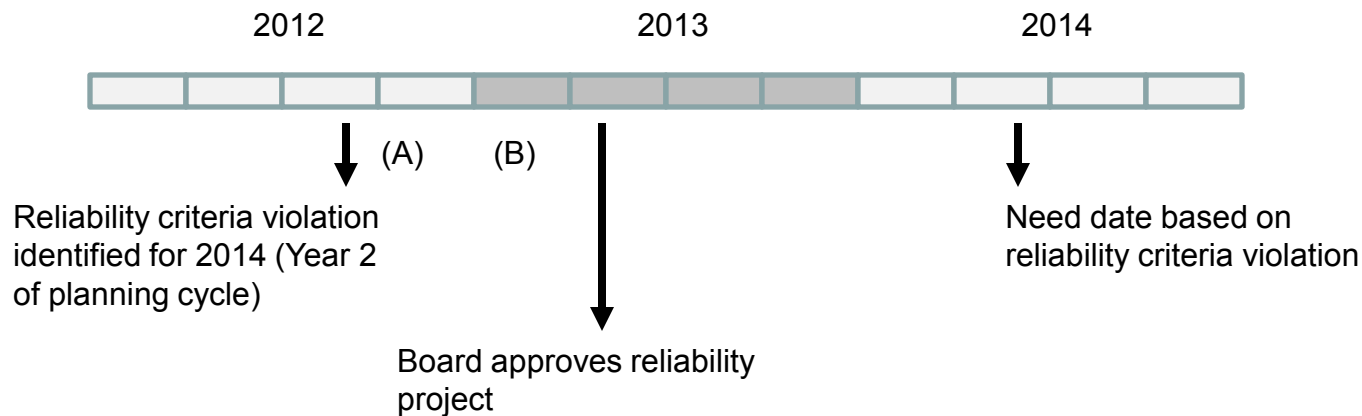




- Current 24-month cycle
  - Utilize proposal window (Nov – Feb) (A)
  - Update models in 2013 and re-validate 2014 criteria violations (now in Year 1) (B)
  - Evaluate proposed solutions, identify optimal solution (including adjusting proposed solutions or identifying new solution) (C)
  - Make recommendation to Board for approval before year end
  - Assign upgrade to constructing entity with approximately 1/2 years to construct

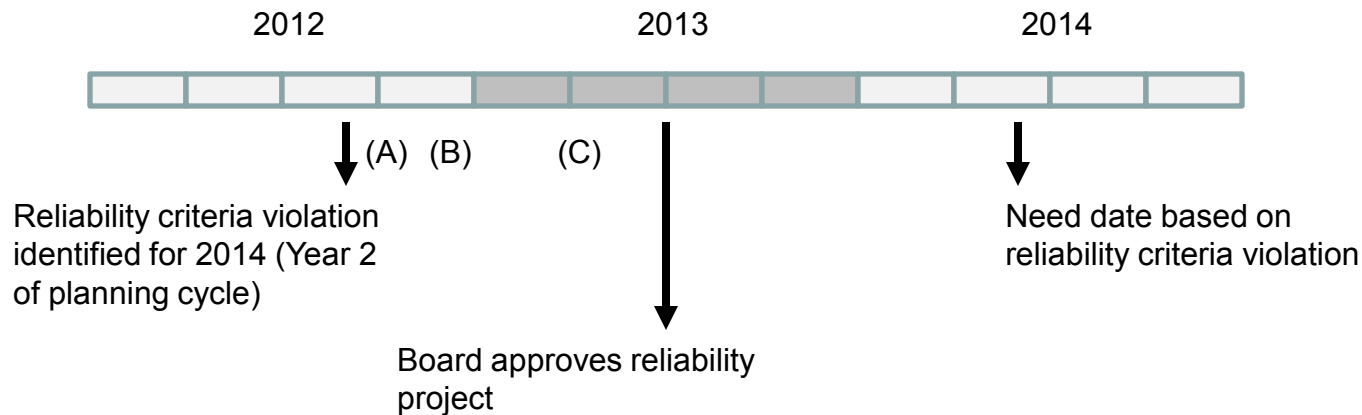


- Alternative
  - Utilize 12-month cycle with short proposal window (A) followed by evaluation and assignment to constructing entity (B)
    - Assuming no update to base case, Board approval at month 16 (approx. 13 months to construct)
    - Solutions not in 2013 12-month cycle base case



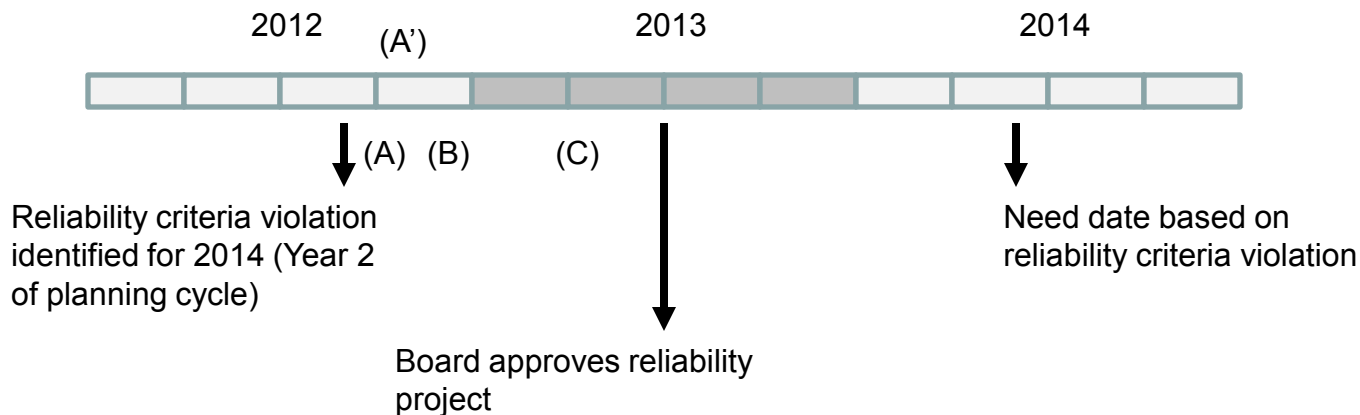
- Alternative

- Utilize 12-month cycle, TO identifies likely solution (backstop?) (A)
- Short proposal window for any projects that are not upgrades to existing infrastructure (B) followed by evaluation and assignment to constructing entity (C)
- Would have to evaluate infrastructure upgrades to ensure that they are most effective solution
- Could have situation where infrastructure upgrade doesn't solve violation and proposal window is delayed
- Assuming no update to base case, Board approval at month 18 (approx. 11 months to construct)
- Solutions not in 2013 12-month cycle base case



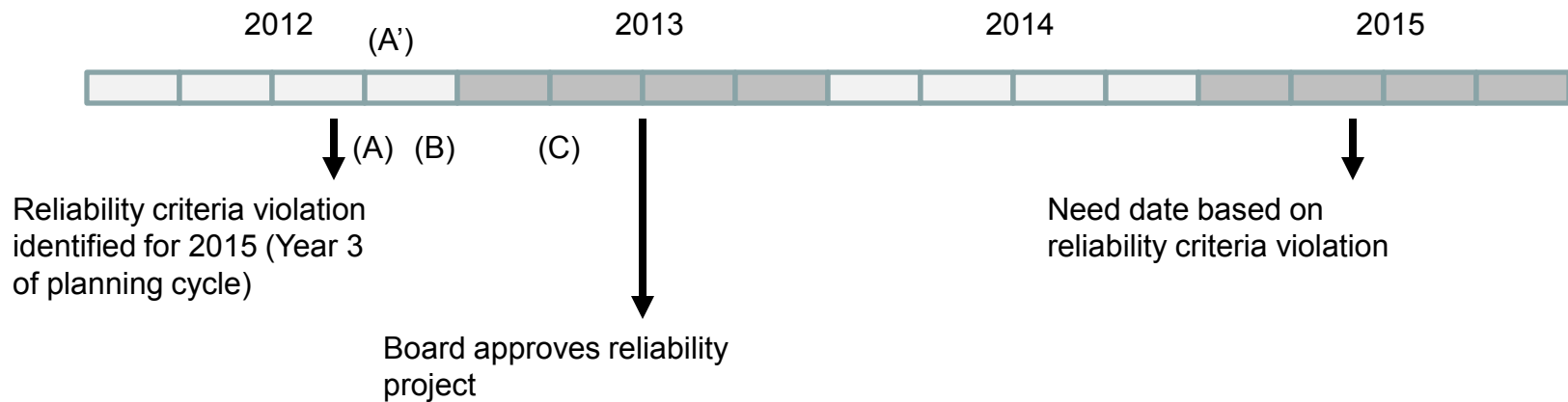
- Alternative

- Utilize 12-month cycle, TO identifies likely solution (backstop?) (A)
- Based on nature and timing of solution, PJM determines whether a proposal window is appropriate (A')
- If no, Board approval before year end, assign to incumbent, approx. 17 months to construct
- If yes, short proposal window for any projects that are not upgrades to existing infrastructure (B) followed by evaluation and assignment to constructing entity (C)
- Would have to evaluate infrastructure upgrades to ensure that they are most effective solution
- Could have situation where infrastructure upgrade doesn't solve violation and proposal window is delayed
- Assuming no update to base case, Board approval at month 18 (approx. 11 months to construct)
- Solutions not in 2013 12-month cycle base case



- Alternative

- Utilize 12-month cycle, TO identifies likely solution (backstop?) (A)
- Based on nature and timing of solution, PJM determines whether a proposal window is appropriate (A')
- If no, Board approval before year end, assign to incumbent, approx. 29 months to construct
- If yes, short proposal window for any projects that are not upgrades to existing infrastructure (B) followed by evaluation and assignment to constructing entity (C)
- Would have to evaluate infrastructure upgrades to ensure that they are most effective solution
- Could have situation where infrastructure upgrade doesn't solve violation and proposal window is delayed
- Assuming no update to base case, Board approval at month 18 (approx. 23 months to construct)
- Solutions not in 2013 12-month cycle base case



1 - Reserve reliability projects for some number of years (5, 4, 3, or 2) and earlier to incumbent

2 - PJM determines, based on nature and timing of solution, whether to assign to incumbent or hold a short proposal process for reliability projects for some number of years (5, 4, 3, or 2) and earlier

3 - Utilize extended 12-month cycle - TO provides backstop and PJM assigns reliability projects reserved in order 1000 to incumbent and holds a short proposal process non-reserved projects for some number of years (5, 4, 3, or 2) and earlier

4 - Utilize extended 12-month cycle with a short proposal process for all reliability projects for some number of years (5, 4, 3, or 2) and earlier

5 - Utilize 24-month cycle with proposal process for all reliability projects for some number of years (5, 4, 3, or 2) and later

6 - Utilize 24-month cycle with proposal process for all reliability projects for some number of years (5, 4, 3, or 2) and later – Reserve earlier projects to incumbent on an interim basis until experience is gained with proposal process – Revisit and re-file, as required

	12-month cycle	24-month cycle		
Year 4 Reliability Criteria Violations	1 <sup>st</sup> violation in Year 4 – Standard cycle – assign all to incumbent – 3 ½ years to construct	1 <sup>st</sup> violation in Year 6 – Standard cycle – proposal window – identify builder – 4 ½ year to construct – don't wait for next 24-month cycle	1 <sup>st</sup> violation in Year 6 – Standard cycle – proposal window – identify builder – 4 ½ year to construct – wait for next 24-month cycle for short-term projects – 2 ½ years to construct	1 <sup>st</sup> violation in Year 5 – Standard cycle – proposal window – identify builder – 3 ½ year to construct – don't wait for next 24-month cycle ***
	1 <sup>st</sup> violation in Year 4 – Extended cycle – short proposal window – identify builder – 3 years and 1 month to construct			
	1 <sup>st</sup> violation in Year 4 – Extended cycle – TO backstop – short proposal window – identify builder – 2 years and 11 months to construct	1 <sup>st</sup> violation in Year 5 – Standard cycle – proposal window – identify builder – 3 ½ year to construct – wait for next 24-month cycle for short-term projects – 1 ½ years to construct	1 <sup>st</sup> violation in Year 4 – Standard cycle – proposal window – identify builder – 2 ½ year to construct	
	1 <sup>st</sup> violation in Year 4 – Extended cycle – TO backstop – PJM determines whether proposal window is appropriate or assigns to incumbent			
Year 5 Reliability Criteria Violations	1 <sup>st</sup> violation in Year 5 – Standard cycle – assign all to incumbent – 4 ½ years to construct	1 <sup>st</sup> violation in Year 7 – Standard cycle – proposal window – identify builder – 5 ½ year to construct – don't wait for next 24-month cycle	1 <sup>st</sup> violation in Year 7 – Standard cycle – proposal window – identify builder – 5 ½ year to construct – wait for next 24-month cycle for short-term projects – 3 ½ years to construct	1 <sup>st</sup> violation in Year 6 – Standard cycle – proposal window – identify builder – 4 ½ year to construct – don't wait for next 24-month cycle
	1 <sup>st</sup> violation in Year 5 – Extended cycle – short proposal window – identify builder – 4 years and 1 month to construct			
	1 <sup>st</sup> violation in Year 5 – Extended cycle – TO backstop – short proposal window – identify builder – 3 years and 11 months to construct	1 <sup>st</sup> violation in Year 6 – Standard cycle – proposal window – identify builder – 4 ½ year to construct – wait for next 24-month cycle for short-term projects – 2 ½ years to construct	1 <sup>st</sup> violation in Year 5 – Standard cycle – proposal window – identify builder – 3 ½ year to construct	
	1 <sup>st</sup> violation in Year 5 – Extended cycle – TO backstop – PJM determines whether proposal window is appropriate or assigns to incumbent		***	

\*\*\* Need to resolve linkage to interconnection process

	12-month cycle				24-month cycle
Year 2 Reliability Criteria Violations	Standard cycle – assign all to incumbent – 1 ½ years to construct	Extended cycle – short proposal window – identify builder – 13 months to construct	Extended cycle – TO backstop – short proposal window – identify builder – 11 months to construct	Extended cycle – TO backstop – PJM determines whether proposal window is appropriate or assigns to incumbent	Standard cycle – proposal window – identify builder – 6 months to construct
Year 3 Reliability Criteria Violations	Standard cycle – assign all to incumbent – 2 ½ years to construct	Extended cycle – short proposal window – identify builder – 25 months to construct	Extended cycle – TO backstop – short proposal window – identify builder – 23 months to construct	Extended cycle – TO backstop – PJM determines whether proposal window is appropriate or assigns to incumbent	Standard cycle – proposal window – identify builder – 18 months to construct