CONSTRUCTION REACTOR OVERSIGHT PROCESS RESOURCES

The U.S. Nuclear Regulatory Commission (NRC) staff originally estimated that direct inspection will require 35,000 hours per unit over the course of a 5-year nuclear power plant construction project. Revised estimates due to delays in schedule and construction of the first of a kind power plant are now estimated to be 43,100 hours for Vogtle Unit 3 and 33,300 hours for Vogtle Unit 4. These revised estimates include:

- 21,000 hours for inspections related to Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) for Vogtle Unit 3, and 15,000 hours for Vogtle Unit 4;
- 12,100 hours for construction and operational program inspections for Vogtle Unit 3, and 8,300 hours for Vogtle Unit 4;
- 5,000 hours for reactive inspections above the baseline program in response to licensee performance issues, allegations, and nonperformance issues or events;
- and 5,000 hours for technical support of construction inspections.

Table 1 lists the total number of direct inspection hours expended through September 2019 of CY 2019 for Vogtle, Units 3 and 4. Figure 1 shows this information in a graph.

Table 1 Actual Total Construction Inspection Program Resource Expenditures

Unit	ITAAC Inspection Hours/Percentage of Planned Inspections	Program Inspections	Reactive/Allegation-Related Inspections	Technical Support*	Total
Vogtle, Unit 3	12,683/60%	7,322	539	1811	22,355
Vogtle, Unit 4	6,999/47%	4,530	335	1007	12,871

* To date, NRC Headquarters technical staff inspection support has not been linked to a specific docket and has not been fee billable. Therefore, it is not possible to distinguish the technical support hours expended by the Office of New Reactors on each unit. In Table 1, the total hours expended on technical support have been split between the units.

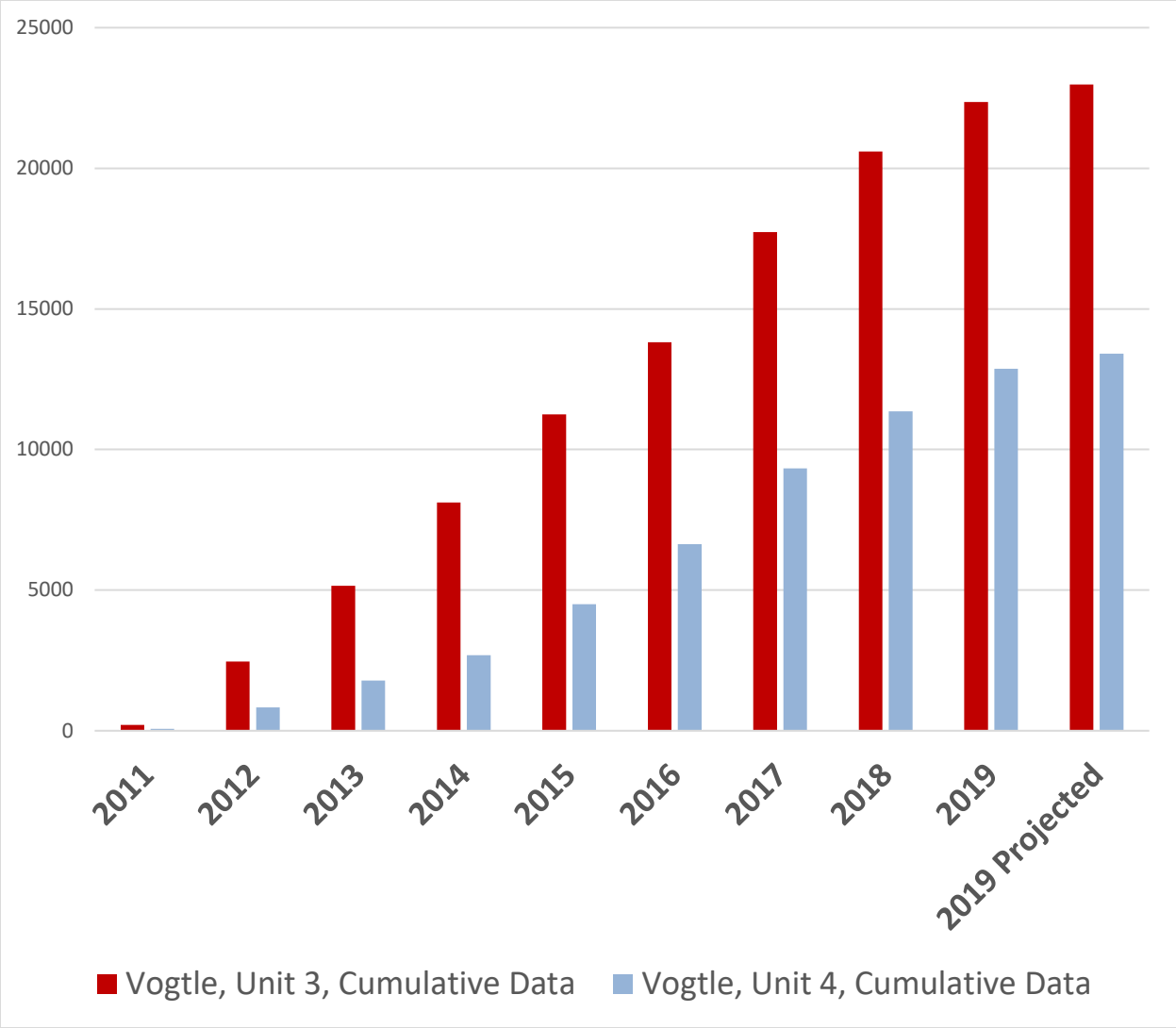

Figure 1 Total cumulative direct inspection hours for Vogtle, Units 3 and 4

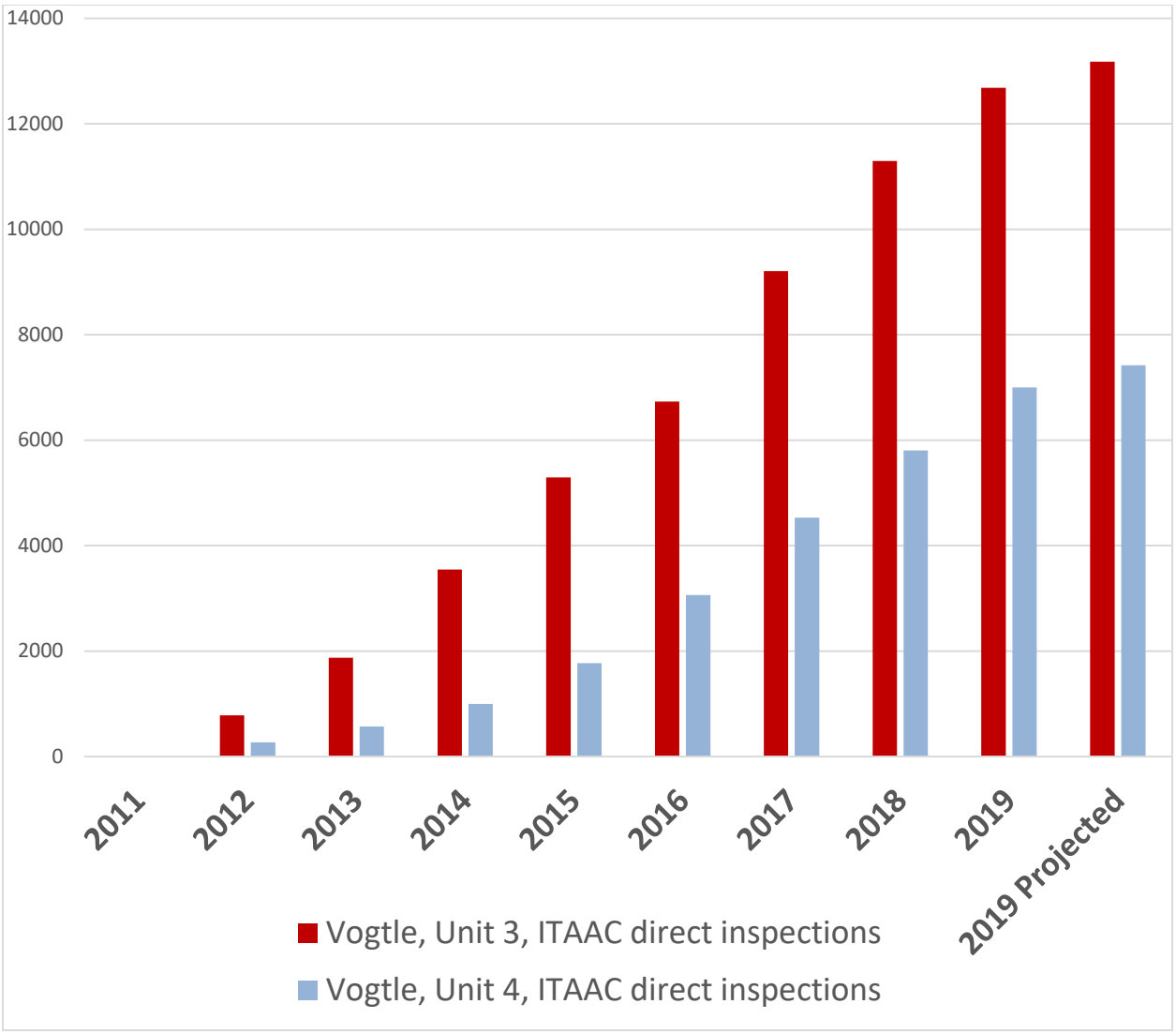

Figure 2 Cumulative ITAAC-related direct inspection hours for Vogtle, Units 3 and 4

Figure 2 summarizes the direct inspection hours expended for inspections related to ITAAC since the start of construction at Vogtle Units 3 and 4. Through careful inspection planning in coordination with construction schedules, the staff has been able to refine its estimate of the direct inspection hours required for ITAAC inspection. The staff expects that efficiencies in the inspection process will continue to result in a lower number of actual direct inspection hours than planned. The staff estimates that there will be approximately 21,000 hours of direct inspection related to ITAAC for Unit 3 and 15,000 hours of direct inspection related to ITAAC for Unit 4, based on detailed planned hours and efficiencies that have been observed between planned and actual hours.

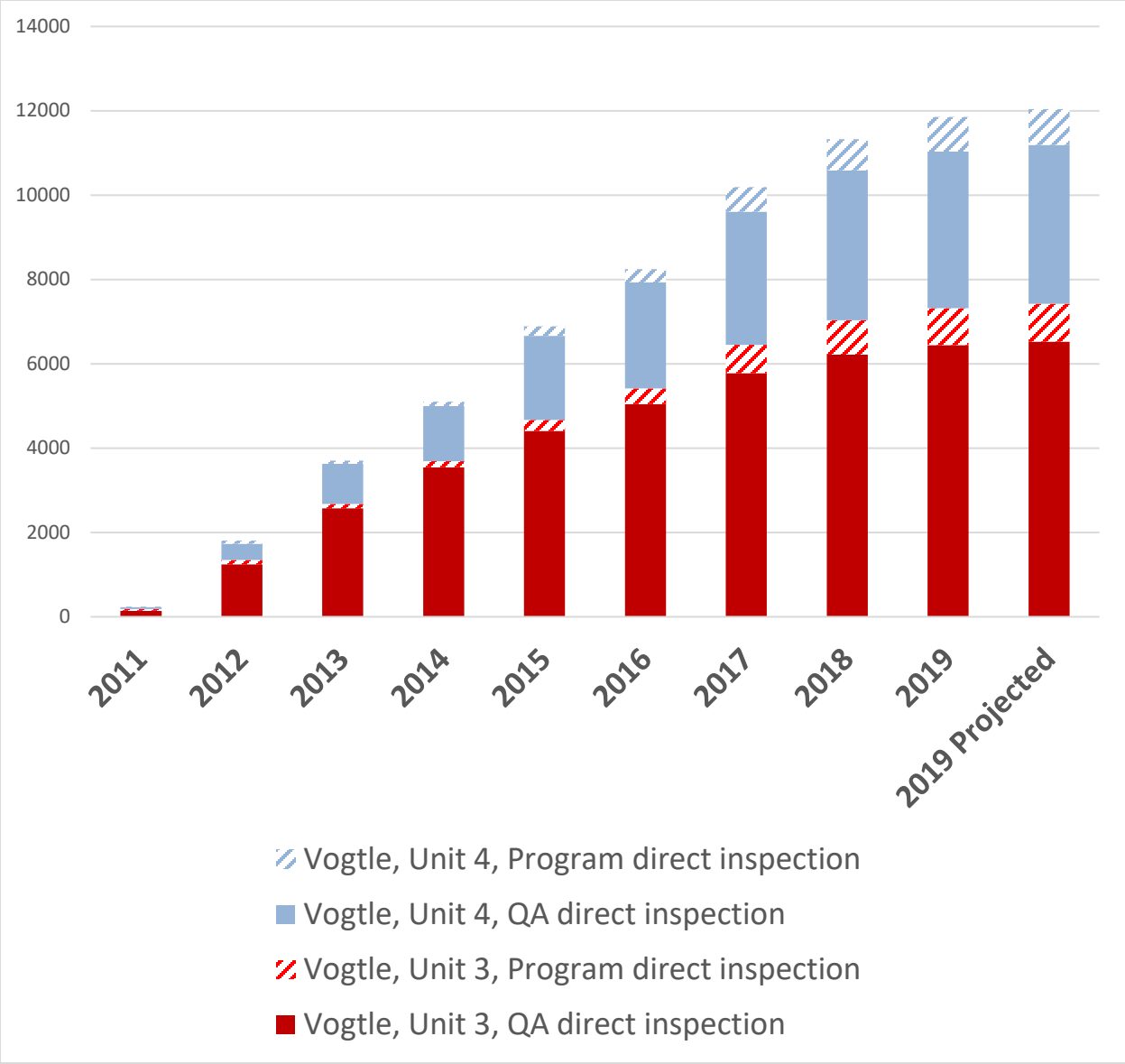

Figure 3 Cumulative quality assurance and program inspection for Vogtle, Units 3 and 4

Figure 3 summarizes the NRC staff resources in hours expended for programmatic inspection since the start of construction at Vogtle, Units 3 and 4. The staff performs construction QA inspections annually in accordance with Inspection Procedure 35007, "Quality Assurance Program Implementation during Construction and Pre-Construction Activities," dated December 8, 2016 (Agencywide Documents Access and Management System Accession No. ML16285A443). Based on Vogtle's detailed schedule, program inspections are estimated at 12,100 hours for Vogtle Unit 3, and 8,300 hours for Unit 4.

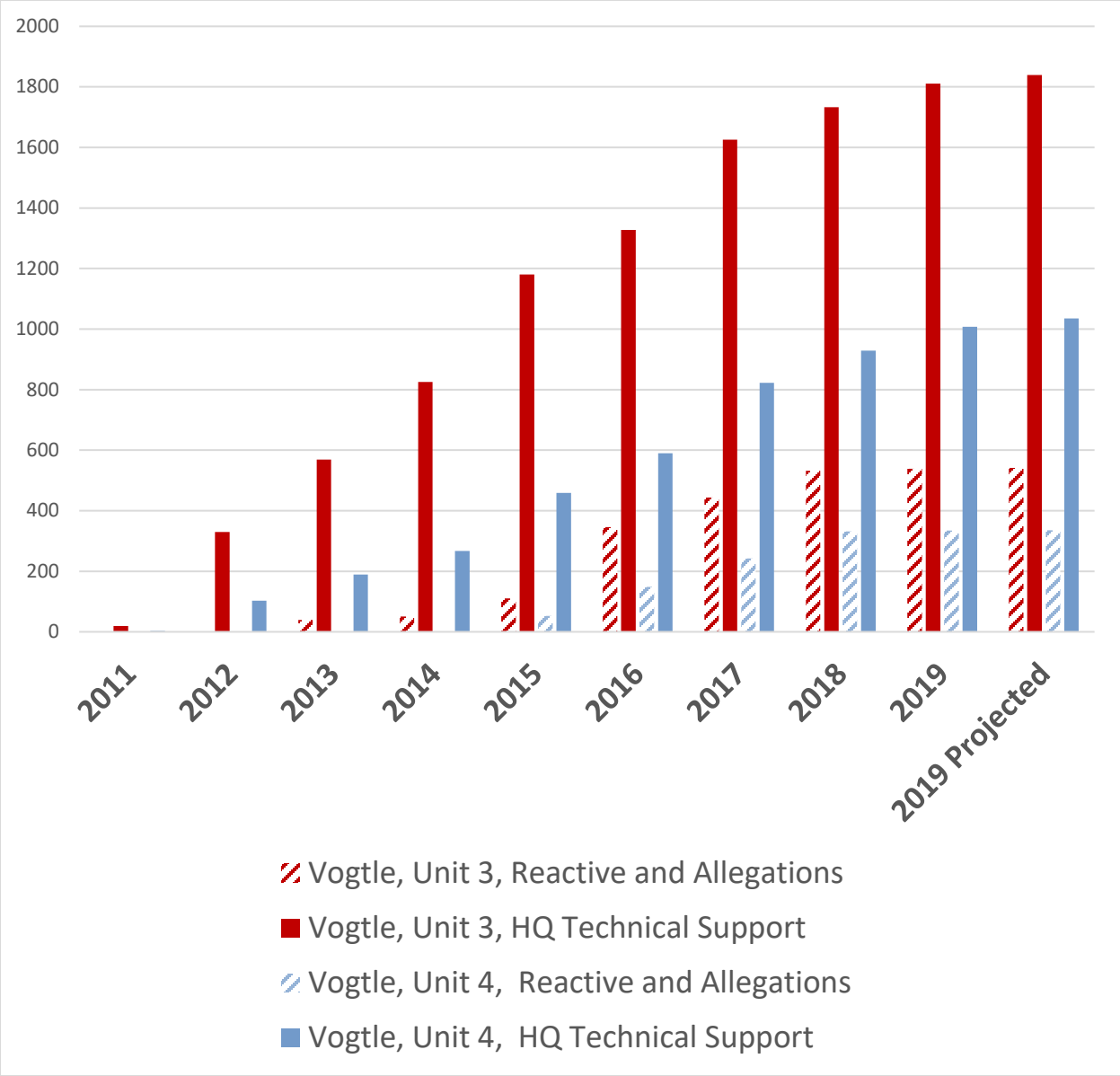

Figure 4 Cumulative reactive and technical support hours for Vogtle, Units 3 and 4

Figure 4 summarizes the direct inspection hours expended for reactive and allegation inspections and hours spent providing technical support for inspections since the start of construction at Vogtle, Units 3 and 4. The staff has not identified a need to revise the estimate of 5,000 hours for reactive inspections above the baseline program in response to licensee performance issues, allegations, and nonperformance issues or events, or the 5,000 hours estimated for technical support for construction inspections.