

ERR # /When?	Need	Requirements/Outcome	What to do
<p>N. 1: Before construction phase starts or existing equipment with high risk</p>	<ul style="list-style-type: none"> If the experiment includes one-of-a-kind equipment with potential novel safety implications (examples: SC magnets, tritium or high-power cryogenic targets). 	<ul style="list-style-type: none"> Fabrication of the equipment can start or it is deemed to be acceptable for use at the lab. 	<ul style="list-style-type: none"> Provide the complete conceptual design of the full equipment. Decommissioning plans for target and activated components must also be developed as appropriate. Carry out a safety analysis of the proposed equipment design, identify safety issues and incorporate mitigating measures necessary to be operated in planned experiment. Provide manpower and resource requirements for equipment fabrication
<p>N. 2: Before a scheduling request can be submitted</p>	<ul style="list-style-type: none"> If the experiment requires items in the category above and/or equipment beyond the declared base equipment. 	<ul style="list-style-type: none"> At this stage: <ul style="list-style-type: none"> Fabrication of the equipment is completed or near-completed, or <ul style="list-style-type: none"> Design of the equipment is finalized and manpower and resource requirements for equipment fabrication and installation are identified. After this review, the experiment layout and components are considered frozen, and any design modifications will require approval by the Division Management. This review will generate the list of recommendations to be answered prior to issuance of the Experiment Readiness Clearance. 	<ul style="list-style-type: none"> This review includes an experiment installation plan, timeline and resource requirements. Things that must be presented or available for this ERR include: <ul style="list-style-type: none"> Experiment <ul style="list-style-type: none"> Who is assigned as Physics Division Liaison for the experiment Installation schedule Preliminary commissioning and run plans System ownership and responsibility Preliminary data analysis plan Equipment <ul style="list-style-type: none"> Existing equipment requirements finalized New equipment design and requirements including cost finalized (if applicable) Timeline for equipment fabrication & installation (if applicable) Manuals for new equipment available UL or equivalent certification for new equipment available Manpower <ul style="list-style-type: none"> Manpower and resource requirements for equipment fabrication (if applicable) and installation Documentation <ul style="list-style-type: none"> Preliminary OSPs for new systems (on official forms with Subject Matter Experts indicated) Flammable gas analysis if applicable Preliminary: RSAD, ESAD, COO, ERG, Operations Manual
<p>N. 3: Before running the experiment</p>	<ul style="list-style-type: none"> Every experiment needs this review. If the experiment only includes base equipment and only in operation modes already executed, or only additional equipment that is a direct clone of base equipment, it ONLY needs this review. 	<ul style="list-style-type: none"> The experiment is ready to be safely and effectively executed. The experiment is ready for expedient data analysis towards publication. The experiment is ready for the issuance of the Experiment Readiness Clearance. 	<ul style="list-style-type: none"> Provide: <ul style="list-style-type: none"> Final documentation: ESAD, RSAD, COO, ERG, Operational Manual Safety Check lists Experimental procedures both for shift leaders and shift takers and for experts Proof of readiness for expedient data analysis towards publication.