

September 20, 2017

*Letter sent electronically – original to follow via regular mail*

Kim Phillips  
Senior Regulatory Officer  
Offshore Petroleum Management Division  
Natural Resources Canada  
Atlantic Canada Energy Office  
1801 Hollis Street, Suite 700  
Halifax, NS B3J 3C8

Dear Ms. Phillips:

**Re: CAPP Comments on the Atlantic Offshore Occupational Health and Safety Initiative  
Proposed Policy Intent for Phase 2 of the Atlantic OHS Regulations dated 21 June 2017**

The Canadian Association of Petroleum Producers (CAPP) is pleased to have this opportunity to provide comments on the Proposed Policy Intent for Phase 2 of the Atlantic OHS Regulations dated 21 June 2017. CAPP members have been operating in the Atlantic offshore region for almost fifty years and are committed to the safe and responsible exploration, development and production of Canada's petroleum resources. Our comments, provided in this letter and in the attached table, are founded upon our collective experience in Canada and around the world.

The following discussion pertains to specific areas which CAPP believes need further consideration in policy intent and future regulation.

### **Foreign Flagged Vessels & Installations**

It is CAPP's view that the regulations should permit the adoption of codes and standards that have been accepted by Flag states and Classification societies for foreign flagged vessels and installations. These vessels and installations are designed and constructed to internationally recognized standards and should receive equivalency when verification and monitoring is conducted by a recognized classification society.

Similar to Canadian flagged vessels, foreign flagged vessels are governed by a comprehensive technical and regulatory regimes that includes statutory requirements established under the flag

state as well as globally adopted international requirements that include SOLAS, International Maritime Organization, Maritime Labour Convention as well as Class Rules.

Classification societies are licensed by flag states to survey and classify vessel and installation and issue certificates on their behalf. They classify and certify marine vessels and structures on the basis of their structure, design and safety standards. A classification society's specialized and technical workforce comprises of ship surveyors, mechanical engineers, material engineers, piping engineers, and electrical engineers. Surveyors employed by a classification society inspect ships at all stages of their development and operations to make sure that their design, components, and machinery are developed and maintained in accordance with the standards set for their class.

### **Demonstration of Conformity to Codes and Standards**

Policy intent introduces the concept for demonstrating "conforms to" that permits industry to complete a gap analysis to show how an alternative code or standard conforms to the requirements of a stated code or standard.

It is CAPP'S view that the this approach may add an additional mechanism to alleviate the hurdle of having to pursue the regulatory query process and recommends that a collaborative approach be proactively adopted to ensure this process is fully understood by the OHS initiative, Industry and Regulators.

The policy intent does not provide any information on the timeline or process for demonstrating conformity, decision making criteria and the mechanism for resolving areas of non-conformity and agreeing to the severity and applicability of any non-conformity. Also clarity on the level of independence of the assessment must be understood such as whether a credible conformity assessment body must be utilized to conduct the assessment or would an internal process for conducting the gap analysis is acceptable.

### **Regulatory Overlap – Passenger Transport**

As stated in our Phase 1 submission the 2014 OHS amendments to the Accord Acts introduced the concept of regulations under Part III.1 being applicable to passengers in transit to or from offshore installations. Transport Canada has regulations that also apply to safety of helicopter and marine transport. This overlap has led to uncertainty over which regulations apply for vessel and helicopter owners, contracting parties, crew and passengers. CAPP is seeking clarity and certainty regarding this area of overlap which is critical to the safety of offshore oil and gas activities.

Any vessel engaged in passenger transport is governed by comprehensive technical and regulatory regimes that includes statutory requirements established under the flag state as well as globally adopted international requirements that include SOLAS, International Maritime Organization, Maritime Labour Convention as well as Class Rules.

### **Performance and Risk Based Maintenance and Inspection**

The Phase 2 policy intent document continues to outline prescriptive requirements for equipment maintenance and inspection and frequently limits equipment inspections and maintenance to the requirements as prescribed by the equipment manufacturer.

Industry's maintenance and inspection approach for equipment is based on good oilfield practice which necessitate the inclusion of operations experience, safety and risk criteria as well original equipment manufacturer (OEM) specifications. Industry has advanced from simply adhering to strict prescriptive maintenance plans and has adopted the use of risk based principles for inspection and maintenance of all equipment and specifically safety critical equipment. For example, the use of risk based principles has been approved by regulator for their application to the inspection of pressure vessels. Operators ensure OEM requirements are considered in the development of operational procedures and inspection and maintenance plans.

Although it may seem reasonable to state in policy intent that inspections and maintenance must be in line with the OEM's instructions it should be recognized that OEM's instructions are typically conservative. They also often apply to the use of tools by untrained personnel versus competent trades persons. Additionally, manufacturers requirements may not contemplate the jurisdictional requirements under which the equipment is operated thus these requirements may be influenced primarily by jurisdictional requirements where the equipment was manufactured.

Management systems are common practice in industry and form the basis for providing assurance that equipment is maintained, inspected and operated as intended. These systems are subject to audited and are assessed by regulators and other third parties such as Certifying Authorities or Classification Societies.

Specifying the frequency of inspection in policy text does not necessarily lead to a higher quality state for equipment and facilities. CAPP proposes that policy intent state the desired outcome that stems from sound maintenance and inspection philosophy. Thus the frequency of the inspection and maintenance campaigns may be adjusted accordingly to meet the desired outcome. As such, the prescriptive requirement to inspect facilities and equipment "annually or more frequently..." is not considered good oilfield practice.

## **Policy Overlap between FORRI & OHS**

In our review of the both OHS policy intent and policy intent for the Framework regulations CAPP have observed a significant number of areas that should be reviewed for unnecessary duplication and redundancy as this overlap could result in misinterpretation and incorrect application of the regulations.

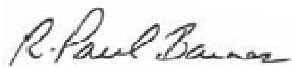
### **Conclusion**

CAPP's attached detailed comments and previous submissions identify those sections of the Document in which consideration of performance based policy text pertaining to equipment maintenance and inspection should be incorporated into regulation.

We look forward to continued engagement with Natural Resources Canada, the Provinces of Newfoundland and Labrador and Nova Scotia and members of the Project Team as they develop the Occupational Health and Safety Regulations.

If you have any questions please do not hesitate to contact me at 709 724-4200.

Sincerely,



R. Paul Barnes  
Director, Atlantic Canada and Arctic

c.c. Fred Allen, FORRI Co-Chair, NL Department of Natural Resources  
Kim Himmelman, FORRI Co-Chair, Nova Scotia Department of Energy

Attachment

	Phase 2 Policy Intent	CAPP Comments
	<b>TOOLS AND MACHINERY</b>	
3	<p><u>General</u></p> <ol style="list-style-type: none"> <li>1) Tools, machinery, equipment and supplies must be               <ol style="list-style-type: none"> <li>a) made of good quality material adequate for the work for which they are intended to be used;</li> <li>b) used only for their intended purpose;</li> <li>c) equipped with a device to ensure a secure hand grip where necessary</li> </ol> </li> <li>2) Tools, machinery and equipment, including guards, must be operated, maintained and repaired by a competent person.</li> </ol>	<p><b>Rationale:</b> In reference to subsection 1 and the use of the following description are vague and subjective: For 1 (a) “good quality materials” and For 1 (c) “secure handgrip”</p> <p>In reference to subsection 3(2) CAPP propose that</p> <p><b>Proposed Policy Text:</b> For 1 (a): designed and constructed for the work for which they are intended to be used For 1 (c): remove section (c) as it would be inherent in their design and construction.</p> <p><b>Rationale:</b> In reference to section 3 (2) CAPP recommend that a definition for “Qualified Person” be included with the master list of definitions and that the definition for Qualified Electrical Person be replaced with this standard definition for “Qualified Person”. Subsequently the term “qualified person “ may be applied as necessary to a person performing any duty or task that requires a certain level of training and experience but not necessarily comprehensive knowledge of the regulations.</p> <p><b>Proposed Definition:</b></p> <p><i>“Qualified person”</i> means one who has demonstrated skills and knowledge related to the construction and operation of equipment and installations and has received safety training to identify and manage the hazards involved;</p> <p>or alternatively ,</p> <p><i>“Qualified person”</i> – in respect of a specified duty, a person who, because of his or her knowledge, training and experience, is qualified to perform that duty safely and properly.</p> <p><b>Proposed Policy Text:</b> (2) Tools, machinery and equipment, including guards, must be operated, maintained and repaired by a qualified person.</p>

	Phase 2 Policy Intent	CAPP Comments
5	<p>Tools and machinery used in the workplace must conform and be used in accordance with the requirements laid out in the applicable standard relevant to the tool or machinery:</p> <ul style="list-style-type: none"> <li>a) CSA Standard C22.2 No. 60745-2, ULC Standard 60745-2 or International Electrotechnical Commission Standard 60745-2 for portable electric tools;</li> <li>b) ANSI A10.3, <i>Safety Requirements for Powder-Actuated Systems for all explosive actuated fastening tools</i>;</li> <li>c) CSA Standard Z432, <i>Safeguarding of Machinery</i>;</li> <li>d) CSA Standard Z142, <i>Code for the Power Press Operation: Health, Safety and Safeguarding Requirements for punch presses</i>;</li> <li>e) ANSI Standard B11.4 <i>American National Standard for Machine Tools -- Shears -- Safety Requirements for Construction, Care, and Use</i>;</li> <li>f) ANSI Standard B11.5 <i>American National Standard for Machine Tools -- Ironworkers -- Safety Requirements for Construction, Care, and Use</i>.</li> </ul>	<p><b>General Comment:</b> As stated in our OHS Phase 1 and FORRI Phase 1 and 2 submissions, the regulatory query process typically contemplates internationally recognized standards and guidelines to demonstrate equivalency to prescribed regulations and standards, further emphasizing the fact that international standards should be accepted through the performance based approach.</p> <p>Where it becomes necessary for international vessels and installations conducting short term or seasonal operations to adopt Canadian or North American requirements the impact of this requirement extends beyond the substitution of equipment. There is also a competency matter when equipment is substituted or standards are changed as personnel have to be re-trained and competencies are then impacted. In addition, developed and implemented inspection, maintenance and management systems are impacted as well. Thus the consequence of imposing adherence to a Canadian or North American standard may not result in safer systems of work when considered in totality.</p> <p>CAPP propose that the reference to these North American standards be replaced with performance based requirements for tools and machinery; or policy should state provision for acceptance of the rules, codes or standards acceptable to a recognized classification society.</p> <p><b>Proposed Policy Text:</b> Add new section (2) In the case of any foreign flagged vessel or installation, where applicable tools and machinery must conform to and be used according to the rules or codes of a recognized classification society.</p>

	Phase 2 Policy Intent	CAPP Comments
6	<p>All portable electric tools must be grounded, except if they</p> <ul style="list-style-type: none"> <li>a) are powered by a self-contained battery;</li> <li>b) have a protective system of double insulation; or</li> <li>c) are used in a location when reliable grounding cannot be obtained if the tools are supplied from a double-insulated portable ground fault circuit interrupter of the class A type that conforms to CSA Standard C22.2 No. 144, <i>Ground Fault Circuit Interrupters</i>.</li> </ul>	<p><b>General Comment:</b> CAPP proposes that the reference to CSA C22 be replaced with performance based requirements for portable electrical tools; or policy should state provision for acceptance of the rules, codes or standards acceptable to a recognized classification society.</p> <p><b>Proposed Policy Text:</b></p> <ul style="list-style-type: none"> <li>d) In the case of any foreign flagged vessel or installation, where applicable the grounding of portable electric tools must conform to and be used according to the rules or codes of a recognized classification society.</li> </ul>

<p>15</p> <p><u>Abrasive Blasting and High Pressure Washing</u></p> <ol style="list-style-type: none"><li>1) An employer shall ensure that a risk assessment is completed and identified control measures put in place before any abrasive blasting, high pressure washing process or related cleanup is started which may cause release of a harmful level of an air contaminant</li><li>2) Written safe work procedures must be developed and followed for any abrasive blasting, high pressure washing or a similar operation</li><li>3) Where abrasive blasting, high pressure washing or similar operation is conducted outside a structure, the process shall be restricted to a work zone which is identified by warning signs or similar means as a contaminated area.</li><li>4) Only employees who are necessary to perform the work shall be permitted inside an enclosure or a restricted work zone where abrasive blasting, high pressure washing or a similar operation is conducted.</li><li>5) The operating controls for a high pressure washing or abrasive blasting machine shall be<ol style="list-style-type: none"><li>a) located near the nozzle in a position where the operator's hands are when using the device;</li><li>b) a continuous pressure type that immediately stops the flow of material when released; and</li><li>c) protected from inadvertent activation.</li></ol></li><li>6) Where hand operated controls are impracticable, subsection (5)(a) does not apply and an operator shall use a foot operated control or equivalent safety device.</li><li>7) High pressure hoses, pipes, and fittings shall be fitted with a safety restraining device to prevent excessive sway and movement.</li><li>8) Except where the process is isolated from the operator in a separate cabinet, suitable respiratory protective equipment shall be provided and worn whenever abrasive blasting, or a similar operation is conducted.</li></ol>	<p><b>General Comment:</b> In reference to subsection 15 (7) CAPP recommend the removal of the term “fitting” or use the term connections as applied in Section 8.</p> <p><b>Proposed Policy Text:</b> 7) High pressure hoses, pipes, and <i>connections</i> shall be <i>equipped</i> with a safety restraining device to prevent excessive sway and movement.</p>
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	Phase 2 Policy Intent	CAPP Comments
	<b>HOT WORK</b>	
20	<p>An employer shall ensure that an employee does not perform hot work unless all of the following conditions are satisfied:</p> <ul style="list-style-type: none"> <li>a) In the case of an explosive or flammable gas vapour, the atmospheric concentration is less than 5% of the lower explosive limit, as determined by an appropriate gas detection device,</li> <li>b) Oxygen concentrations are in less than 22.5%</li> <li>c) The atmosphere is continuously monitored for flammable substances and toxic gases if there is a risk of it being present in the area</li> <li>d) all potential sources of flammable and explosive gases are identified and blinded and locked out,</li> <li>e) a competent person patrols and maintains a fire watch until all fire hazards have passed,</li> <li>f) fire fighting equipment appropriate to the potential loss exposure is provided;</li> <li>g) A coating on metal which could emit harmful contaminants, including lead, chromium, organic materials, or toxic combustion products shall be removed from the base metal, whenever practicable, before welding or cutting.</li> </ul>	<p><b>General Comment:</b> Capp recommend that competent be replaced with qualified. Refer to CAPP comment under section 3 and under the definition of Qualified Electrical Person.</p> <p><b>Proposed Policy Text:</b></p> <ul style="list-style-type: none"> <li>g) a qualified person patrols and maintains a fire watch until all fire hazards have passed,</li> </ul>
21	<p>Prior to undertaking any hot work activity, the area and adjacent areas that may be affected must be cleaned, inspected and tested to ensure no combustible, flammable or explosive materials, dust, gas, vapour or residue, or other material that could produce a toxic or flammable vapour when heated, exists.</p>	<p><b>Rationale:</b> Section 21 should be combined with Section 20 and restated to be more specific with the work area and remove the reference to “adjacent”. Also recommend the removal of the term “cleaned” as the area must be made safe by whatever process is required.</p> <p><b>Proposed Policy Text:</b> Prior to undertaking any hot work activity, <b>the work area and areas</b> that may be affected must be <b>made safe</b>, inspected and tested to ensure no combustible, flammable or explosive materials, dust, gas, vapour or residue, or other material that could produce a toxic or flammable vapour when heated, exists.</p>

	Phase 2 Policy Intent	CAPP Comments
22	<p>Where hot work uses gas:</p> <ul style="list-style-type: none"> <li>a) the regulators and associated flexible connecting hoses must be tested immediately after it is connected to a gas cylinder to ensure that there is no leak of a gas supply.</li> <li>b) No person shall perform a test required in (1) with a substance that is oil, fat or grease based.</li> <li>c) A person must be stationed appropriately in order to action an emergency shut-off, if required.</li> <li>d) Where a leak of the gas supply develops during the performance of hot work using gas               <ul style="list-style-type: none"> <li>i. the gas supply shall be immediately cut off; and</li> <li>ii. The work shall not be resumed until the leak is repaired and tested to verify the repair was successful.</li> </ul> </li> </ul>	<p><b>Rationale:</b> In reference to Section 22, the requirements stated are excerpts from CSA W117 Safety in Welding, Cutting and Allied Processes which was stipulated in Section 19.</p> <p>CAPP believes the testing of welding equipment would be addressed under the OEM manual?</p> <p><b>Proposed Policy Text:</b> CAPP recommends the removal of subsection 22 as the prescriptive requirements may conflict with future revision to the CSA standard as well OEM recommendations.</p>
	<b>BOILERS AND PRESSURE VESSELS</b>	
26	<p>Boilers and pressure vessels location on a marine installation or structure shall comply with the requirements outlined in Section 7.3 of the Framework Regulations (<i>see Framework Regulations Phase 3 draft policy intent</i>).</p>	<p><b>General Comment:</b> CAPP request clarification on the application of the Framework Regulation to vessels in this section. If the Framework Regulations are applicable to vessels then this section should be deleted to avoid having to cross reference regulations.</p>
	<b>ELEVATORS AND MANLIFTS</b>	

	Phase 2 Policy Intent	CAPP Comments
27	<p><u>Standards</u></p> <p>e) The design, installation, use, operation, maintenance and inspection of any elevator must conform to ASME A17.1/CSA B44, <i>Safety Code for Elevators and Escalators</i>; or</p> <p>f) The design, installation, use, operation, maintenance and inspection of any manlift must, conform to CSA Standard B311, <i>Safety Code for Manlifts</i>.</p>	<p><b>General Comment:</b> As stated in CAPP comment for Subsection 3, these of specific standards pertaining to elevators and manlifts result in the need for RQFs to obtain work authorizations for international vessels and installations to work in the Atlantic offshore area.</p> <p>It may be impractical to demonstrate conformity for these vessels and installations as the elevators and manlifts will be designed under international classification approved standards.</p> <p><b>Proposed Policy Text:</b></p> <p>g) In the case of any foreign flagged vessel or installation, where applicable the design, installation, use, operation, maintenance and inspection of any elevator or manlift must conform to the rules or codes of a recognized classification society.</p>

	Phase 2 Policy Intent	CAPP Comments
29	<p><u>Inspection, Testing, Maintenance and Repair</u></p> <ol style="list-style-type: none"> <li>1) Every elevator, and manlift must be inspected, and tested by a competent person to determine that the standards are met               <ol style="list-style-type: none"> <li>a) before the elevator or manlift is placed in service;</li> <li>b) after an alteration to the elevator or manlift; and</li> <li>c) once every 12 months or per manufacturers specifications.</li> </ol> </li> <li>2) A record of each inspection, test and maintenance performed must:               <ol style="list-style-type: none"> <li>a) be signed by the person who made the inspection, test or conducted the maintenance;</li> <li>b) include the date of the inspection, test or maintenance and the identification and location of the elevator or manlift; and</li> <li>c) set out the observations of the competent person inspecting, testing or performing maintenance on the elevator and manlift on the safety of the devices.</li> </ol> </li> <li>3) Capacity of the elevator and the Certificate of inspection, displaying date of inspection expiry, must be posted in elevators.</li> <li>4) Records of inspection, maintenance and testing must be retained in accordance with Section XX <i>(Record retention schedule - to be included in Phase 3)</i></li> </ol>	<p><b>Clarification Request:</b> Does this apply to dumb waiters (i.e. elevators that only carry supplies, not personnel)?</p>
	<b>MATERIALS HANDLING</b>	

	Phase 2 Policy Intent	CAPP Comments
30	<p><b>Safe Lifting Program</b></p> <p>The Employer shall develop a Safe Lifting Program, as part of the broader OHS program, that establishes safe processes with respect to the key factors that impact safe lifting operations, including marine personnel transfers, including, but not limited to the following:</p> <ul style="list-style-type: none"> <li>a) a list of potential hazards of the work and their associated risks;</li> <li>b) organization, planning and performance of lifting operations, including routine and non- routine lifts;</li> <li>c) operational and environmental limits, such as wind, sea state, pitch, heave, roll and temperature;</li> <li>d) maintenance, including repairs, and inspection of lifting equipment, fixed pad eyes and loose lifting gear;</li> <li>e) training and competency required for people performing the work;</li> <li>f) a method for communicating the safe-lifting program to any person who may be affected by the program; and</li> <li>g) management of contractors and third-party equipment owners.</li> </ul>	<p><b>Rationale:</b> CAPP recommends the removal of the reference to “Safe Lifting Program and OHS Program” as these areas are integral components of a management system. The processes for ensuring safe lifting operations and occupational health and safety will reside within the management system.</p> <p><b>Propose Policy text:</b> The Employer shall develop and implement processes specific to key factors that impact safe lifting operations including marine personnel transfers, but not limited to the following:.....</p>
31	<p><b>Training</b></p> <ul style="list-style-type: none"> <li>1) Every materials handling equipment operator must be instructed and trained in the safe and proper use of the materials handling equipment in accordance with any instructions provided by the manufacturer and the applicable standard and taking into account the conditions of the work place in which the equipment operator will operate the materials handling equipment.</li> <li>2) Training records must be retained in accordance with Section XX (<i>Record retention schedule to be included in Phase 3</i>)</li> </ul>	<p><b>Rationale:</b> In reference subsection 31 (1), CAPP believes the statement “...in accordance with any instructions provided by the manufacturer and the applicable standard...” is all encompassing and should be revised to require only instruction that is directly applicable to the operations of the materials handling equipment.</p> <p><b>Proposed Policy Text:</b> “.....in accordance with the relevant instructions provided by the manufacturer and the applicable standard and...”</p>

	Phase 2 Policy Intent	CAPP Comments
33	<p><b>Lifting and Positioning Personnel</b></p> <ol style="list-style-type: none"> <li>1) Materials handling equipment must not be used for hoisting or positioning a person, unless the equipment is equipped with a platform, bucket, basket or other device that is designed and certified for that purpose and is provided with a fail-safe control system that will prevent a free fall of the load that is carried.</li> <li>2) The use of materials handling equipment to undertake personnel transfers must be carried out in accordance with Part XX (<a href="#">Personnel Transfer</a>)</li> </ol>	<p><b>Rationale:</b> In reference to Section 33.1 CAPP recommend removal of the double negative.</p> <p><b>Proposed Policy Text:</b> 1) Materials handling equipment used for hoisting or positioning a person, must be equipped with a platform, bucket, basket or other device that is designed and certified for that purpose and is provided with a fail-safe control system that will prevent a free fall of the load that is carried.</p> <p><b>Rationale:</b> In reference to Section 33. CAPP recommends including a policy statement prohibiting the use of equipment designed solely for personnel lifting to be used for cargo handling operations (i.e.: man riding tuggers)?</p> <p><b>Proposed Policy Text:</b> 3) Lifting equipment that is intended solely for hoisting or positioning a person must not be used for cargo or material handling purposes.</p>
	<p><b>Design, Installation and Protection of Materials Handling Equipment and Areas</b></p>	

	Phase 2 Policy Intent	CAPP Comments
35	<p><u>Standards</u></p> <p>1) The design, construction and installation of offshore cranes must be certified to either:</p> <ul style="list-style-type: none"> <li>a) API Spec 2C <i>Specification for Offshore Cranes</i>;</li> <li>b) EN 13852-1 <i>Cranes, Offshore Cranes, Part 1—General Purpose Offshore Cranes</i>;</li> <li>c) DNV GL Standards for Certification – <i>Lifting Appliances</i>; or</li> <li>d) Lloyd’s Register <i>Code for Lifting Appliances in a Marine Environment</i>.</li> </ul> <p>2) The use, maintenance, inspection and operation of offshore cranes must conform to either:</p> <ul style="list-style-type: none"> <li>b) API Standard API RP 2D, <i>API Recommended Practice for Operation and Maintenance of Offshore Cranes</i> ; or</li> <li>c) EN 13852-1 <i>Cranes, Offshore Cranes, Part 1—General Purpose Offshore Cranes</i>.</li> </ul>	<p><b>Rationale:</b> CAPP recognizes the inclusion of additional international standards under Section 35 and recommends its application where possible. However, CAPP proposes that a more advanced approach would be to replace the reference to standards with performance based requirements; or policy should state provision for acceptance of the rules, codes or standards acceptable to a recognized classification society.</p> <p><b>Proposed Policy Text:</b> For 35 (1) (e) In the case of any foreign flagged vessel or installation, where applicable the design, construction and installation of offshore cranes must be certified to the rules or codes of a recognized classification society.</p> <p>For 35 (2) (d) In the case of any foreign flagged vessel or installation, where applicable the use, maintenance, inspection and operation of offshore cranes must conform to the rules or codes of a recognized classification society.</p>

<p>36</p> <p>The design, construction, use, maintenance, inspection and operation of:</p> <ul style="list-style-type: none"> <li>a) overhead and gantry cranes must conform to CSA B167 <i>Overhead travelling cranes - Design, inspection, testing, maintenance, and safe operation</i>;</li> <li>b) draw works and associated equipment must be certified to API Standard API RP 8B, <i>Inspections, Maintenance, Repair and Remanufacture of Hoisting Equipment</i>;</li> <li>c) conveyors, cable ways or other similar materials handling equipment must conform to ASME Standard ANSI/ASME B20.1, <i>Safety Standards for Conveyors and Related Equipment</i>;</li> <li>d) forklifts must conform to either:             <ul style="list-style-type: none"> <li>i. CSA B335 <i>Safety Standard for Lift Trucks</i>; or</li> <li>ii. ANSI standard B 56.1 <i>Safety Standard for Powered Industrial Trucks</i></li> </ul> </li> </ul>	<p><b>Rationale</b></p> <p>In reference to subsection 36 (b) API RP 8B provides guidelines and establishes requirements for inspection, maintenance, repair, and remanufacture of items of hoisting equipment manufactured according to API 8A, API 8C, or ISO 13535 used in drilling and production operations, in order to maintain the serviceability of this equipment. Thus this document is a recommended practice applicable to inspection and maintenance not design or construction. Also, the correct title is noted below:</p> <p><i>”API Recommended Practice 8B, Recommended Practice for Procedures for Inspections, Maintenance, Repair, and Remanufacture of Hoisting Equipment”</i></p> <p>API Specification 7K, Drilling and Well Servicing Equipment provides general principles and specifies requirements for design, manufacture, and testing of new drilling and well-servicing equipment and of replacement primary load-carrying components manufactured subsequent to the publication of this specification. Thus draw works and associated equipment must be certified to API Specification 7K, Drilling and Well Servicing Equipment. Additionally, as this is a requirement that is applicable to a drilling installation it is recommended that this requirement may be more suited for inclusion within FORRI Phase 3 policy.</p> <p><b>General Comment:</b></p> <p>CAPP proposes that the reference to these standards be replaced with performance based requirements for lifting and material handling equipment; or policy should state provision for acceptance of the rules, codes or standards acceptable to a recognized classification society.</p> <p><b>Proposed Policy Text:</b></p> <ul style="list-style-type: none"> <li>b) inspection, maintenance, repair, and remanufacture of items of hoisting equipment must conform to the guidelines and requirements stated in <i>API Recommended Practice 8B, Recommended Practice for Procedures for Inspections, Maintenance, Repair, and Remanufacture of Hoisting Equipment”</i></li> </ul> <p><b>Proposed Policy Text:</b></p> <p>Add new section 36 (2): In the case of any foreign flagged vessel or installation, where applicable the design, construction, use, maintenance, inspection and operation of lifting or material handling equipment must conform to the rules or codes of a recognized classification society.</p>
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	Phase 2 Policy Intent	CAPP Comments
40	<p><u>Means of Entering and Exiting</u></p> <p>1) Materials handling equipment must have a safe means of entering and exiting</p> <ol style="list-style-type: none"> <li>a) the work area of the equipment operator;</li> <li>b) any other place on the equipment to which an employee requires regular access.</li> </ol> <p>2) A safe means referred to in subsection (1) shall take into account:</p> <ol style="list-style-type: none"> <li>a) the average employee's body dimensions while wearing personal protective equipment and shall not require the employee to jump from the materials handling equipment; and</li> <li>b) emergency evacuation and rescue</li> </ol>	<p><b>Rationale:</b> Section 40 (2) (a) CAPP recommend the removal of the reference to “<i>average employee’s body dimensions</i>” as safe access must be provided for all operators irrespective of body dimensions.</p> <p><b>Proposed Policy Text:</b> 2) A safe means referred to in subsection (1) shall take into account:</p> <ol style="list-style-type: none"> <li>a. the use of personal protective equipment;</li> <li>b. shall not require the employee to jump from the materials handling equipment; and</li> <li>c. emergency evacuation and rescue</li> </ol>
44	<p><u>Fire Protection</u></p> <p>Materials handling equipment must have adequate fire protection equipment for the hazard and any manual fire protection equipment installed must be readily accessible to the equipment operator while the operator is in the operating position.</p>	<p><b>Rationale:</b> CAPP believe that safety equipment should be readily accessible to the Operator at all times and recommend removal of.”...while the operator is in the operating position”.</p> <p><b>Proposed Policy Text:</b> Materials handling equipment must have adequate fire protection equipment for the hazard and any manual fire protection equipment installed must be readily accessible to the equipment operator.</p>

	Phase 2 Policy Intent	CAPP Comments
47	<p><u>Protection from Falling, Flying or Shifting Objects</u></p> <ol style="list-style-type: none"> <li>1) If the circumstances under which materials handling equipment is used presents a risk that the equipment operator may be struck by an intruding, falling, flying object or shifting load, the employer must equip the materials handling equipment with a protective structure of a design, construction and strength that it will, under all foreseeable conditions, prevent the penetration of the object or load into the area occupied by the equipment operator.</li> <li>2) A protective structure referred to in subsection (1) must be constructed from non-combustible or fire-resistant material and designed to permit quick exit from the materials handling equipment in an emergency.</li> <li>3) If, during the operation of materials handling equipment, the load will pass over the equipment operator's position, the equipment operator must not occupy the materials handling equipment unless it is equipped with a protective structure referred to in subsection 2 (above).</li> <li>4) Glass in doors, windows and other parts of materials handling equipment must be of a type that will not shatter into sharp or dangerous pieces on impact.</li> <li>5) If glass presents a hazard, including interference with visibility, the materials handling equipment must not be used.</li> </ol>	<p><b>General Comment:</b> CAPP recommend the removal of the policy text stated in Subsection 47.3 as the need for the protection of the equipment operator under any circumstance is inherent in policy text under subsection 47.1.</p>
	<p><b>Operation</b></p>	

	Phase 2 Policy Intent	CAPP Comments
55	<p><u>Signals</u></p> <ol style="list-style-type: none"> <li>1) A code of hand and communication signals for the purposes of section 54(1)(b) must be established prior to lifting operations and               <ol style="list-style-type: none"> <li>a) every signaller and equipment operator must be instructed in the use of the code;</li> <li>b) a copy of the code must be kept in a place where it is readily available for examination by the signallers, equipment operators and other employees, and</li> <li>c) all personnel involved in lifting operations on offshore installations, supply vessels and shore bases must know the hand signal for "emergency stop".</li> </ol> </li> <li>2) The employer must designate a competent person as the signaller.</li> <li>3) A signaller must not perform duties other than signaling while any materials handling equipment under the signaller's direction is in motion.</li> <li>4) A signal to stop given in an emergency by any person granted access to the work place shall be obeyed by an equipment operator.</li> <li>5) Where any movement of materials handling equipment that is directed by a signaller poses a risk to the safety of any person, the signaller shall not give the signal to move until that person is warned of, and protected from, the risk.</li> <li>6) Where the equipment operator of any materials handling equipment does not understand a signal, the equipment operator shall consider that signal to be a stop signal.</li> </ol>	<p><b>General Comment:</b></p> <p>Refer to CAPP comment under section 3 and under the definition of Qualified Electrical Person.</p> <p>CAPP recommends that competent be replaced with qualified and the policy text state:</p> <ol style="list-style-type: none"> <li>1) The employer must designate a qualified person as the signaller.</li> </ol>

	Phase 2 Policy Intent	CAPP Comments
58	<p><u>Positioning the Load</u></p> <ol style="list-style-type: none"> <li>1) Where materials handling equipment is travelling with a raised or suspended load, its equipment operator shall ensure that the load is carried as close to the deck or floor as the situation permits and shall not in any case transport the load at or beyond the point at which the loaded equipment becomes unstable.</li> <li>2) Any load that has been assessed as a risk to slide on or fall from materials handling equipment resulting in a hazardous condition shall be secured to prevent such movement.</li> <li>3) Before a load is raised by materials handling equipment, the load must be inspected by a competent person to ensure it is secured to the hoist in an adequate manner by means of appropriate loose lifting gear.</li> <li>4) A load on a crane or hoist shall be safely landed and supported, before being unhooked.</li> <li>5) Tag lines or similar devices must be used to control any swinging of a load that is being lifted by a crane except when the use of the lines may be hazardous to the safety of any person.</li> <li>6) Loads must not be left hanging by a crane unless the crane operator is at the controls of the crane.</li> <li>7) A unitized load transported on a forklift shall not project a distance greater than half its height above the fork carriage, backrest or back rest extension of the forklift.</li> <li>8) No part of a load comprised of loose objects may project above the fork carriage, backrest or back extension of a forklift.</li> </ol>	<p><b>General Comment:</b></p> <p>Refer to CAPP comment under section 3 and under the definition of Qualified Electrical Person.</p> <p>CAPP recommends that competent be replaced with qualified and the policy text state:</p> <ol style="list-style-type: none"> <li>3) Before a load is raised by materials handling equipment, the load must be inspected by a qualified person to ensure it is secured to the hoist in an adequate manner by means of appropriate loose lifting gear.</li> </ol>

	Phase 2 Policy Intent	CAPP Comments
61	<p>1) Every crane must</p> <ul style="list-style-type: none"> <li>a) have posted inside the crane control cab load capacity charts that specify the boom angle and safe working load for each block and for each operating mode (static, dynamic and personnel lifting), as required;</li> <li>b) have posted inside the crane control cab approved laydown areas and restricted areas, if any and</li> <li>c) be equipped with               <ul style="list-style-type: none"> <li>i. boom and block travel limiting devices,</li> <li>ii. a load measuring device that has been calibrated, at minimum, according to manufacturers' specifications,</li> <li>iii. a device to indicate the boom angle where the rated capacity is affected by the boom angle, and</li> <li>iv. a device to indicate the boom extension or load radius where the rated capacity of the equipment is affected by boom extension or load radius.</li> </ul> </li> </ul> <p>2) All crane hooks must be equipped with safety latches designed to prevent a load from falling out of the hook under all operating conditions.</p> <p>3) A running line sheave on a crane or hoist shall be equipped with a device to retain the rope in the sheave groove.</p> <p>4) An electrically powered crane shall have a means for the equipment operator to safely interrupt the main electric circuit under a load condition.</p>	<p><b>General Comment:</b> CAPP suggests that the policy text under subsection 61.1 do not apply to all crane types and appear to be more related to pedestal cranes and recommend that the policy text be revised to be applicable to cranes in general.</p>
62	<p>A bridge, gantry, or overhead travelling crane operated by a pendant or remote control shall have markings on the crane structure or building, visible to the equipment operator, clearly indicating the direction of hook, bridge and trolley motions compatible with those marked on the controls.</p>	
	<p><b>Loose Lifting Gear and Pad Eyes</b></p>	

	Phase 2 Policy Intent	CAPP Comments
64	<p>1) The design, construction, inspection, testing, maintenance and use of any loose lifting gear must conform to the following standards, as applicable, to the type of equipment being used.</p> <ul style="list-style-type: none"> <li>a) ASME B30.9 – <i>Slings</i></li> <li>b) ASME B30.10 – <i>Hooks</i></li> <li>c) ASME B30.20 – <i>Below the Hook Lifting Devices</i></li> <li>d) ASME B30.26 – <i>Rigging Hardware</i></li> </ul> <p>2) Employer must be able to produce documentation attesting to the certification of the loose lifting gear to the standard used.</p>	<p><b>General Comment:</b> CAPP proposes that the reference to standards be replaced with performance based requirements for portable electrical tools; or policy should state provision for acceptance of the rules, codes or standards acceptable to a recognized classification society.</p> <p><b>Proposed Policy Text:</b></p> <ul style="list-style-type: none"> <li>a) In the case of any foreign flagged vessel or installation, where applicable the design, construction, inspection, testing, maintenance and use of any loose lifting gear must conform to and be used according to the rules or codes of a recognized classification society.</li> </ul>
66	<p>1) An identification system for the inspection of loose lifting gear and pad eyes must be established and maintained</p> <p>2) Inspections of loose lifting gear and pad eyes shall be conducted by a competent third party at least every six months.</p>	<p><b>General Comment:</b> In reference to subsection 66 (2) CAPP believe the requirement is inconsistent with the CAPP Safe Lifting Practice requirement which has been adopted to inspect pad eyes every 12 months.</p>
67	<p>When wire rope clips are used in loose lifting gear, only drop forged (galvanized) wire rope clips are permitted to be used.</p>	<p><b>General Comment:</b> CAPP believes the reference is prescriptive and should be removed. It is inherent that any material used for loose lifting gear be suitable and intended for lifting purposes.</p> <p><b>Proposed Policy Text:</b> When wire rope clips are used in loose lifting gear, only wire rope clips made from a suitable material for the intended lifting operation are permitted to be used</p>
	<p><b>PERSONNEL TRANSFER</b></p>	

	Phase 2 Policy Intent	CAPP Comments
73	<p>This Part does not apply to personnel transportation by helicopter or vessel to/from/in-between a marine installation or structure.</p>	<p><b>Clarification Request:</b></p> <p>In reference to Section 73, CAPP recommend that the text be revised to ensure clarity in identifying what activities are included by stating what the section applies and omit any reference to where it does not apply. The intent would be to alleviate any misinterpretation and application.</p>
76	<p><u>Procedures</u></p> <p>The employer must establish and implement safe procedures for the transfer of personnel that include, at minimum, the following:</p> <ul style="list-style-type: none"> <li>a) communication between both points of transfer;</li> <li>b) the use of personal protection devices, protective clothing or other personal protection equipment by the person being transferred;</li> <li>c) the inspection and testing of the equipment to ensure that it is in safe condition;</li> <li>d) limiting the weight transferred to no more than the safe working load ;</li> <li>e) availability of fast rescue crafts</li> <li>f) identify training requirements of each individual assigned to plan, manage, participate in and supervise the personnel transfer operation, and</li> <li>g) the prohibition of the transfer of freight in personnel transfer equipment, except in an emergency.</li> </ul>	<p><b>Rationale:</b></p> <p>In reference to subsection 76 (g) CAPP believe the policy text should be restated to permit the transfer of personal baggage where the transfer device is so designed. This would be consistent with the policy stated under Section 33 for lifting equipment that is intended solely for hoisting or positioning a person must not be used for cargo or material handling purposes.</p> <p><b>Proposed Policy Text:</b></p> <ul style="list-style-type: none"> <li>g) the transfer of freight in personnel transfer equipment may not be permitted except: <ul style="list-style-type: none"> <li>i. where the equipment is designed for carriage of personal baggage, or</li> <li>ii. in an emergency.</li> </ul> </li> </ul>

	Phase 2 Policy Intent	CAPP Comments
78	<p><u>Standards</u></p> <p>1) Every personnel transfer equipment and every safety device attached to it must be certified to the rules or codes of a recognized classification society.</p> <p>2) The personnel transfer apparatus shall be fabricated using corrosion-resistant material suitable for use in a marine environment and take into consideration the environmental conditions in the operating area (e.g. temperature, wind, sea state, etc)</p> <p>3) The personnel transfer equipment must:</p> <ul style="list-style-type: none"> <li>• be made of a non-collapsible construction or assembled to a non-collapsible construction</li> <li>• protect personnel from injury caused by landing impact and falling,</li> <li>• allow personnel to ride securely on the inside either standing or seated;</li> <li>• be adequate size to accommodate a medical stretcher and one other person,</li> <li>• be labelled with the maximum capacity of weight it is designed to safely carry</li> <li>• be buoyant, where applicable</li> </ul> <p>4) A secondary safety device must be installed above the load block and the upper master link of the link assembly to ensure that there is redundancy in the event of a failure.</p> <p>5) If a workplace is designed and certified to undertake personnel transfers, it must be equipped with at least two means of personnel transfer.</p>	<p><b>Rationale:</b> In reference to subsection 78 (1), is it intended that the equipment be certified by the CA of the installation? For example, the FROG-6 capsule was certified by ABS (recognized classification society) but was required to have an additional design review and certification performed under DNV 2.22 to be used on an installation where DNV was the CA.</p> <p>CAPP recommends that the text be revised permit the acceptance of personnel transfer equipment that either is approved by the installations Certifying Authority or meets the requirements the requirements of a recognized classification society.</p> <p><b>Proposed Policy Text:</b> 1 Every personnel transfer equipment and every safety device attached to it must be:</p> <ul style="list-style-type: none"> <li>a) meet the requirements of the Certifying Authority for the installation; or</li> <li>b) certified to the rules or codes of a recognized classification society.</li> </ul>



	Phase 2 Policy Intent	CAPP Comments
81	<p><u>Inspection and Testing</u></p> <p>Personnel transfer equipment and every safety device attached to it must be inspected and tested by a competent person:</p> <ul style="list-style-type: none"> <li>a) before the personnel transfer equipment or the safety device attached to it is placed in service;</li> <li>b) after an alteration to the personnel transfer equipment or a safety device attached to it; and</li> <li>c) once every six months</li> </ul>	<p><b>Rationale:</b></p> <p>In reference to subsection 81 (c) CAPP believe that the prescribing of required equipment inspection on a defined frequency is not consistent with modern approach to maintenance programs which include risk based consideration, manufacturer’s recommendations and frequency intervals based on usage, inspection and monitoring data.</p> <p><b>Proposed Policy Text:</b></p> <ul style="list-style-type: none"> <li>c) as required to ensure its suitability for use.</li> </ul>
82	<ul style="list-style-type: none"> <li>1) A record of each inspection, test or servicing made must               <ul style="list-style-type: none"> <li>a) be signed by the competent person who made the inspection and test or conducted the servicing;</li> <li>b) include the date of the inspection, test or servicing the identification and location of the personnel transfer equipment and safety device that were inspected, tested or servicing; and</li> <li>e) set out the observations of the competent person, <del>inspecting, testing and servicing the personnel transfer apparatus and safety device</del> on the safety of the devices.</li> </ul> </li> <li>2) Every record must be retained in accordance with Section XX (<i>Record retention schedule – to be included in Phase 3</i>)</li> </ul>	<p><b>Rationale:</b></p> <p>CAPP suggest that the policy text is subsection 82.1 (c) is difficult to understand.</p> <p><b>Proposed Policy Text:</b></p> <ul style="list-style-type: none"> <li>c) set out any observations made by the competent person on the safety of the devices.</li> </ul>
83	<p><u>Repair and Maintenance</u></p> <p>Repair and maintenance of personnel transfer apparatus and safety devices attached to them must be performed by a competent person.</p>	<p><b>General Comment:</b></p> <p>CAPP recommends that Section 83 be integrated with section 82.</p>
	<p><b>FUELLING</b></p>	
	<p><b>ELECTRICAL SAFETY</b></p>	

Phase 2 Policy Intent	CAPP Comments
<p><i>“Qualified electrical person”</i> means one who has demonstrated skills and knowledge related to the construction and operation of electrical equipment and installations and has received safety training to identify and manage the hazards involved.</p>	<p><b>Rationale:</b> CAPP recommend that a definition for “Qualified Person” be included with the master list of definitions and that the definition for Qualified Electrical Person be replaced with this standard definition for “Qualified Person”. Subsequently the term “qualified person “ may be applied as necessary to a person performing any duty or task that requires a certain level of training and experience but not necessarily comprehensive knowledge of the regulations.</p> <p><b>Proposed Definition:</b></p> <p><i>“Qualified person”</i> means one who has demonstrated skills and knowledge related to the construction and operation of equipment and installations and has received safety training to identify and manage the hazards involved;</p> <p>or alternatively ,</p> <p><i>“Qualified person”</i> - in respect of a specified duty, a person who, because of his or her knowledge, training and experience, is qualified to perform that duty safely and properly.</p>

	Phase 2 Policy Intent	CAPP Comments
85	<p><u>Electrical Safety Program</u></p> <p>1) An electrical safety program shall be developed and implemented, as part of the Employer’s OHS management program, which directs activity appropriate to the risk associated with electrical hazards.</p> <p>2) Electrical safety program shall, at minimum, address the following principles:</p> <ul style="list-style-type: none"> <li>a) Hazard identification and risk assessment;</li> <li>b) assignment of duties and responsibilities;</li> <li>c) inspecting and evaluating the electrical equipment;</li> <li>d) maintaining the electrical equipment’s insulation and enclosure integrity;</li> <li>e) planning every job and document first-time procedures;</li> <li>f) de-energizing if possible;</li> <li>g) reasonably foreseeable unplanned events;</li> <li>h) identifying hazardous areas in which an explosive atmosphere may occur;</li> <li>i) identifying the electrical hazards and arc flash hazards, and reducing associated risk;</li> <li>j) protecting the employee from shock, burn, blast, and other hazards due to the working environment;</li> <li>k) necessary protective equipment and devices;</li> <li>l) using the right tools for the job;</li> <li>m) assessing people’s abilities and necessary training appropriate for the activity;</li> <li>n) Procedures for multiple power systems, where applicable;</li> <li>o) Emergency procedures training and equipment;</li> <li>p) auditing the principles specified within the program;</li> <li>q) Approach boundaries appropriate to the electrical design and installation of the given workplace;</li> <li>r) Safe work procedures for testing electrical equipment and circuits; and</li> <li>s) the number of competent employees present while work is being performed.</li> </ul>	<p><b>Rationale:</b> CAPP recommend that subsection 85.2 which appear to be excepts from CSA Z462 Workplace Electrical Safety Standard be revised to reference the expectations for process associated with electrical safety...hazard identification, evaluation and control and standard and avoid the inclusion of detailed prescriptive requirements.</p> <p>As the policy text will become regulation there exists the real likelihood that these requirements may no longer be valid as standards and practices change or evolve over time and these statement will create compliance issues and encumber the stewarding of best practice for electrical safety in the workplace.</p> <p>It is intended to retain Section 85 with the inclusion of the detailed requirements, CAPP propose revisions noted below.</p> <p><b>Rationale:</b> CAPP recommends the removal of the reference to “electrical safety program and OHS management system” as these areas are integral components of a management system. The processes for ensuring electrical safety and occupational health and safety will reside within the management system.</p> <p><b>Propose Policy text:</b></p> <ul style="list-style-type: none"> <li>1) The Employer shall develop and implement processes and procedures specific to the risk associated with electrical hazards.</li> <li>2) These processes and procedures, where applicable, shall address the following aspects of electrical safety:</li> </ul> <p><b>General Comment:</b> Capp recommend that competent be replaced with qualified. Refer to CAPP comment under section 3 and under the definition of Qualified Electrical Person.</p> <p><b>Proposed Policy Text:</b></p> <ul style="list-style-type: none"> <li>s) the number of qualified persons present while work is being performed.</li> </ul>

	Phase 2 Policy Intent	CAPP Comments
89	<p>1) Workplaces designed, constructed and installed in accordance with the Canadian Electrical Code must conform to the approach boundaries identified in <a href="#">Tables 1A</a> and <a href="#">1B</a>.</p> <p>2) If the workplace is not designed and constructed in accordance with the Canadian Electrical Code, the approach boundaries identified in <a href="#">Tables 1A</a> and <a href="#">1B</a> must be adapted to take into consideration the given electrical design and installation.</p> <p>3) Adapted approach boundary tables must be included in the Electrical Safety Program required under section (1) above.</p>	<p><b>General Comment:</b> CAPP recommend that that tables referenced in subsection 89 (1) (2) be removed and that the policy text reference the Canadian Electrical Code for establishment of approach boundaries.</p> <p>As the policy text will become regulation there exists the real likelihood that these requirements may no longer be valid as standards and practices change or evolve over time and these statement will create compliance issues and encumber the stewarding of best practice for electrical safety in the workplace.</p> <p>Reference in (3) should be to section 85(1) not 89(1)</p> <p><b>Rationale:</b> CAPP recommends the removal of the reference to “electrical safety program electrical safety is an integral component of a management system. The processes for ensuring electrical safety and occupational health and safety will reside within the management system.</p> <p><b>Propose Policy text:</b> 3) Adapted approach boundary tables must be documented in the employers’ management system.</p>

	Phase 2 Policy Intent	CAPP Comments
90	<p><u>Qualified Electrical Person</u></p> <ol style="list-style-type: none"> <li>1) Any person who conducts repairs, alterations, or testing on electrical equipment must be a qualified electrical person.</li> <li>2) Only a qualified electrical person may work within the approach boundaries, identified in in the Electrical Safety Program, of exposed energized electrical conductors and circuit parts or identified arc flash boundaries.</li> <li>3) An employee who is undergoing on-the-job training for the purpose of obtaining the skills and knowledge necessary to be considered a qualified electrical person and who, in the course of such training, demonstrates an ability to perform specific duties safely at his or her level of training and who is under the direct supervision of a qualified electrical person shall be considered to be a qualified electrical person for the performance of those duties.</li> </ol>	<p><b>General Comment:</b> CAPP recommends that the subsection 90.1 also include the “installation” of electrical equipment.</p> <p><b>Rationale:</b> In reference to section 90 (3) CAPP propose the use of a definition for a “Person in Training” which can then be applied to other circumstances or situations where personnel are undergoing training and working under the direct supervision of a qualified person.</p> <p>Definition of “Person in Training”: A person, who is undergoing on-the-job training for the purpose of obtaining skills and knowledge necessary to be considered a qualified person and who, in the course of such training, demonstrates an ability to perform specific duties safely at his or her level of training and who is under the direct supervision of a qualified person.</p> <p><b>Proposed Policy Text:</b> (3) A “Person in Training” as defined within these regulations shall be considered to be a qualified electrical person for the performance of those duties.</p>

	Phase 2 Policy Intent	CAPP Comments
91	<p><u>Working on Electrical Equipment</u></p> <ol style="list-style-type: none"> <li>1) If electrical equipment is energized or may become energized, an employee must not work on the equipment unless the equipment is isolated in accordance with Part XX – <a href="#">Control of Hazardous Energy</a>.</li> <li>2) Notwithstanding the above, where work must be conducted on equipment in an energized state due to equipment design or operational limitations, then:               <ol style="list-style-type: none"> <li>a) work permit is required that:                   <ol style="list-style-type: none"> <li>a. shall be in accordance with Part XX (<i>Permit to Work – was included in Phase 1 policy intent</i>); and</li> <li>b. is signed by the Offshore Installation Manager (OIM), or equivalent level position aboard the marine installation or structure, or a competent person that has been designated to represent the OIM or equivalent position; and</li> </ol> </li> <li>b) the employer must develop and the work must be carried out in accordance with safe work procedures.</li> </ol> </li> </ol>	<p><b>General Comment:</b> CAPP recommends that subsection be revised as the signature requirements should be consistent with the installation protocol as per the Permit to Work procedure which has been addressed in Phase 1. There is no need to define the signatories to permits within this context as the authority to endorse and perform the electrical work is inherent in the PTW procedure.</p> <p><b>Propose Policy Text:</b> Remove section 91.2 (b) or revise to state:</p> <ol style="list-style-type: none"> <li>3) Notwithstanding the above, where work must be conducted on equipment in an energized state due to equipment design or operational limitations, then:         <ol style="list-style-type: none"> <li>a) a work permit is required that:             <ol style="list-style-type: none"> <li>a. shall be in accordance with Part XX (<i>Permit to Work – was included in Phase 1 policy intent</i>); and</li> <li>b. authorized as per the defined signatories detailed within the installation’s permit to work system; and</li> </ol> </li> <li>b. the employer must develop and the work must be carried out in accordance with safe work procedures.</li> </ol> </li> </ol>

	Phase 2 Policy Intent	CAPP Comments
92	<p><u>Work Within Approach Boundaries</u></p> <p>Exposed energized electrical conductors and circuit parts must be put into an electrically safe work condition, in accordance with Part XX (<a href="#">Control of Hazardous Energy</a>), before an employee works within the limited approach boundary of those conductors or parts.</p>	<p><b>General Comment:</b> CAPP recommend that this section be moved closer to or integrated with Section 89 (Approach Boundaries)</p> <p><b>General Comment:</b> CAPP believes that the requirements to maintain an electrical safe work condition would apply to both limited and restricted approach boundary condition.</p>
93	<p><u>Work Permits</u></p> <p>A permit to work, in accordance with Part XX (<i>Permit to Work – was included in Phase 1 policy intent</i>), is required :</p> <ul style="list-style-type: none"> <li>a) Where it is not possible in (1) to put exposed energized electrical conductors and circuit parts into an electrically safe work condition due to equipment design or operational limitations, or</li> <li>b) When the employee works within the vicinity of conductors or circuit parts that are not exposed but an increased likelihood of injury from an exposure to an arc flash hazard or electric hazard exists.</li> </ul>	<p><b>General Comment</b> CAPP recommends that Section 93 be moved and integrated with Section 91.</p>

	Phase 2 Policy Intent	CAPP Comments
94	<p><u>Arc flash</u></p> <p>Where the risk assessment indicates a potential for arc flash hazard:</p> <ul style="list-style-type: none"> <li>a) Arc flash boundaries must be determined using an appropriate method;</li> <li>b) Additional controls must be identified and put in place to protect against injury.</li> </ul>	<p><b>General Comment:</b> For subsection 94 b, CAPP recommend the adding the text “where necessary”.</p> <ul style="list-style-type: none"> <li>b) Where necessary, additional controls must be identified and put in place to protect against injury.</li> </ul>
97	<p><u>Test Instruments and Equipment</u></p> <ul style="list-style-type: none"> <li>1) Only qualified electrical persons shall perform tasks such as testing, troubleshooting, voltage measuring, etc., within the limited approach boundary or arc flash boundary of energized electrical conductors or circuit parts where an electrical hazard exists.</li> <li>2) Test instruments, equipment, and their accessories shall: <ul style="list-style-type: none"> <li>a) Be rated for circuits and equipment where they are utilized;</li> <li>b) be designed for the environment to which they will be exposed;</li> <li>c) be designed for the manner in which they will be utilized; and</li> <li>d) conform with an appropriate standard.</li> </ul> </li> </ul>	<p><b>General Comment:</b> CAPP recommend that subsection 97 (1) be removed as it duplicates the policy text stated in subsection 90 (1).</p>



	Phase 2 Policy Intent	CAPP Comments
100	<p><u>Electrical Room</u></p> <p>1) Electrical rooms shall not be used for storing unrelated, flammable, explosive or combustible materials.</p> <p>2) The working space around and the path of access to every electrical switch, energy-isolating device or meter must be free from obstruction and arranged to give authorized persons ready access to all parts requiring attention.</p> <p>3) Volatile flammable substance shall not be used in an electrical room or confined area where high voltage electrical current is a hazard.</p>	<p><b>Rationale:</b> In reference to subsection 100 (1), CAPP believe the use of the terms “unrelated materials” is vague and difficult to interpret. Would storage of spare electrical parts in the electrical room be acceptable since they are related?</p> <p><b>Proposed Policy Text:</b> 1 Electrical rooms shall not be used for storing incompatible or hazardous material or other material not suited for storage in an electrical room.</p>
103	<p><u>Defective Electrical Equipment</u></p> <p>Defective equipment shall either be put in good order or permanently disconnected.</p>	<p><b>General Comment:</b> The proposed policy text should allow provision for the safe isolation or quarantine of defective equipment until such time as repairs can be completed.</p> <p><b>Proposed Policy Text:</b> Defective equipment shall be repaired, safely isolated or quarantined until the equipment can be restored to proper working order; or, permanently disconnected.</p>

	Phase 2 Policy Intent	CAPP Comments
	<b>CONTROL OF HAZARDOUS ENERGY- LOCKOUT AND OTHER METHODS</b>	

	<b>Phase 2 Policy Intent</b>	<b>CAPP Comments</b>
107	A Hazardous Energy Control program must be established, implemented and maintained that conforms to the program requirements in <i>CSA Z460 Control of Hazardous Energy-- Lockout and other methods</i> .	CAPP recommend that Section 106 and 107 be merged as follows:  <b>Proposed Policy Text:</b> For activities involving the control of hazardous energy a Hazardous Energy Control program that conforms to the requirements stipulated in “ <i>CSA Z460 Control of Hazardous Energy-- Lockout and other methods</i> ”, must be established, implemented and maintained.
108	<u>Permit to Work with Hazardous Energy</u>  A work permit is required for any work involving hazardous energy in accordance with Part XX ( <i>Permit to Work – was included in Phase 1 policy intent</i> )	<b>Clarification Request:</b>  Would this need to be a PTW in addition a signed isolation certificate?  Does Part XX (PTW) address the distinction between the different methods of control of work?
110	1) Every energy-isolating device must be so designed and located as to permit quick and safe operation at all times.  2) All Energy-isolating devices must be clearly labelled or identified to indicate their function, in accordance with the nomenclature and/or identifiers used in the procedures that specify their use. The identification shall correspond to the electrical drawings.	<b>General Comment:</b>  For subsection 110.2, CAPP recommend that “electrical” be replaced with “applicable” drawings

111	<p><u>Lock-out Tag-out</u></p> <p>1) For each machine, piece of equipment, system or process, detailed written instructions for the control of hazardous energy must be issued to the authorized individuals conducting the work for review and use.</p> <p>2) The instructions referred to in subsection (1) must specify</p> <ul style="list-style-type: none"> <li>a) the procedures to be followed for shutting down, isolating, blocking, securing, and relieving stored or residual energy</li> <li>b) the machine, equipment or process to which the instructions apply;</li> <li>c) considerations regarding all required remote and local isolations;</li> <li>d) requirement for verifying that isolation and de-energization have been accomplished;</li> <li>e) any other tests to be performed;</li> <li>f) the procedural steps for placing and removing lockout devices;</li> <li>g) the particulars of the tags or signs to be used;</li> <li>h) the required energy-isolating devices and their locations;</li> <li>i) the method of determining that all persons near the locked out machine, equipment, tool or electrical installation are clear of any hazardous and have been instructed to remain clear before the machine, equipment, tool or electrical installation, or any part of it, is energized;</li> <li>j) the method of notifying a person in the work area of safe conditions for work after a lock-out has been completed;</li> <li>k) The requirements for the machine, equipment, or process to be inspected to ensure that it is ready for return to service.</li> </ul> <p>3) A tag or sign referred to in subsection (2)(g) must</p> <ul style="list-style-type: none"> <li>a) Identify the machine, equipment, or process supplied and energy type;</li> <li>b) Have words directing the person not to start or operate the machine, equipment or process, or display a symbol conveying the same meaning;</li> <li>c) show the date and time at which the machine, equipment, or process was locked out;</li> <li>d) show the name of the employee who applied the lockout;</li> <li>e) Reason for lockout;</li> <li>f) be removed only by the employee who attached it;</li> <li>g) not readily conduct electricity; and</li> <li>h) not be used for other purposes.</li> </ul> <p>4) The employer shall ensure that employees are trained on the procedures for lock-out tag-out.</p>	<p><b>General Comment:</b></p> <p>In reference to subsection 111 (1) CAPP recommend the statement “written instruction “ be replace with the term “lockout procedure” to align with S.112 (1)</p> <p>In reference to subsection 111 (2) (j) consider rewording “completed” to applied or removed</p> <p>In reference to subsection (3)(f) CAPP recommend the policy text consider shift handover instruction per 112 (5)</p> <p><b>Proposed Policy Text:</b></p> <p>111 (3) (f) be removed only by the employee who attached it or in accordance with the handover instructions as defined in the lockout procedure;</p>
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	Phase 2 Policy Intent	CAPP Comments
113	<p><u>Access to energy isolating devices</u></p> <p>When an energy isolating device is locked out, the device must not prevent access to other energy isolating devices</p>	<p><b>General Comment:</b> CAPP recommend that section 113 be combined with Section 110</p>
114	<p><u>Isolating piping systems</u></p> <ol style="list-style-type: none"> <li>1) To isolate piping or a pipeline containing harmful substances, under pressure, and/or high temperature, an employer shall use               <ol style="list-style-type: none"> <li>a) a system of blanking or blinding; or</li> <li>b) a double block and bleed isolation system providing                   <ol style="list-style-type: none"> <li>i. two blocking seals on either side of the isolation point; and</li> <li>ii. an operable bleed-off between the two seals.</li> </ol> </li> </ol> </li> <li>2) An employer must ensure that piping that is blanked or blinded is clearly marked to indicate that a blank or blind is installed.</li> <li>3) An employer must ensure that, if valves or similar blocking seals with a bleed-off valve between them are used to isolate piping, the bleed-off valve is secured in the “OPEN” position and the valves or similar blocking seals in the flow lines are functional and secured in the “CLOSED” position, and is clearly marked as to what position it is in.</li> <li>4) An employer must ensure that the device used to secure the valves or seals described in subsection (3) are               <ol style="list-style-type: none"> <li>a) a positive mechanical means of keeping the valves or seals in the required position; and</li> <li>b) strong enough and designed to withstand inadvertent opening without the use of</li> </ol> </li> </ol>	<p><b>General Comment:</b> In reference to subsection 114 (3) CAPP recommend removal of the word “lines” and propose the policy state:</p> <p><b>Proposed Policy Text:</b> <i>“...and the valves or similar blocking seals in the flow are functional and secured in the CLOSED position....”</i></p>
	<p><b>SMOKING ROOMS</b></p>	

	Phase 2 Policy Intent	CAPP Comments
115	<p>No person shall smoke on or in a workplace except in those areas <del>set aside by the Employer who has control over their workplace for that use.</del></p>	<p><b>General Comment:</b> CAPP propose the following text for Section 115 recommend that section 113 be combined with Section 110</p> <p><i>“No person shall smoke on or in a workplace except in those areas designated as ETS areas”</i></p>
117	<p>When a workplace contains an ETS area it shall be constructed and operated in accordance with this section.</p> <ul style="list-style-type: none"> <li>a) ETS areas shall be maintained under negative pressure with respect to the adjacent area.</li> <li>b) Separation shall be achieved by solid walls, floors, ceilings and doors equipped with automatic closing mechanism.</li> <li>c) Air transferred from ETS-free areas to ETS areas shall be maintained at the required rate regardless of whether or not the doors are opened or closed.</li> <li>d) Re-circulation shall not be permitted.</li> <li>e) Signage shall be posted outside each entrance stating “This Area May Contain Environmental Tobacco Smoke”</li> <li>f) An area previously classed as an ETS area can only be reclassified if the smoke exposure has stopped and <del>odor and irritation from</del> residual ETS contaminants are not apparent.</li> <li>g) ETS areas shall be ventilated at a rate of 50 CFM/occupant (24 L/S/occupant).</li> <li>h) Signage indicating maximum occupancy levels shall be placed outside each entrance to ensure the ventilation operates within design parameters.</li> </ul>	<p><b>General Comment:</b> In reference to subsection 117 (f) CAPP recommend removal of the words “odor and irritation from” and propose the policy state:</p> <p><i>f) An area previously classed as an ETS area can only be reclassified if the smoke exposure has stopped and residual ETS contaminants are not apparent.</i></p>
	<p><b>DEFINITIONS</b></p>	
	<p><i>“Hazardous energy”</i> means any electrical, mechanical, hydraulic, pneumatic, chemical, radiation thermal, gravitational, or other energy that can harm personnel.</p>	

	Phase 2 Policy Intent	CAPP Comments
	<p><i>“Hot work”</i> means any work that involves burning, welding, using fire- or spark-producing tools, or that produces a source of ignition.</p>	<p><b>General Comment:</b> CAPP recommends that the definition for “Hot Work” be revised to incorporate the safe use of intrinsically safe tools and non-sparking explosion proof tools.</p>
	<p><i>“Lockout device”</i> means a lockout instrument on an energy-isolating device in accordance with an established procedure -</p>	<p><b>General Comment:</b> In reference to “Lockout Device” CAPP recommend using text that doesn’t introduce another term.  <i>Lockout device”</i> means a device that prevents the manipulation or removal of an energy isolating device</p>
	<p><i>“Signaller”</i> means a person instructed by an employer to direct, by means of</p>	<p>Text appears to be missing?</p>