Insuring New Technologies

Clean Energy Project Coverage Considerations

While many project risks can be addressed by insurance, “technology risk” is a challenging area for insurers. Many would rather avoid the position of funding the R&D work of an equipment vendor introducing new products or processes. They generally prefer to insure proven technologies and processes, i.e., ones that have established a satisfactory operating history.

With the drive for more efficient, sustainable and environmentally friendly deliverable energy, there has been a steady introduction of new technologies and processes in the production of electricity and fuels. As these new technologies and processes enter the marketplace, WGA is working more with project owners/developers, equipment vendors and project lenders to obtain the broadest available insurance protection for the project participants.

When established reference points are not available, property insurance underwriters use several tools to “carve out” the specific risks of concern. One approach is to start with the assumption that losses arising from new, unproven or prototypical technology arise due to “defective design, plan, specification, materials or workmanship.” This language, or a variation of it, is part of every property damage policy, and it has become the cornerstone for addressing technology risks in property damage policies.

For energy risks, this issue is encountered so frequently that standard policy language has been developed. In general, a property damage policy will not cover the part(s) that failed. In the most restrictive case, the policy will also exclude two other aspects of a loss. It will exclude the costs incurred to allow the repair or replacement of the failed part(s) – sometimes referred to as ‘opening and closing costs.’ Additionally, the policy will not cover the ensuing loss; i.e., the additional damage caused by the failure of a part or parts. The most recent language used by virtually all underwriters active with energy risks was developed by the London Engineering Group and comes in three forms generally referred to as LEG 1, 2 and 3.

An easy scenario in which to envision this exclusion is a gas turbine put into commercial operation in which rotor blades that have been substantially redesigned with new metallurgy and coatings to achieve higher turbine efficiency. In reviewing this risk, insurers would consider how the changes depart from existing proven equipment. They may want to exclude the failure of the blade, the opening and closing of the turbine to carry out the repairs, and finally, the additional damage to other parts of the turbine caused by the failure of the redesigned blades. In the parlance of property damage insurance, this exclusion is generally referred to as LEG 1, and it is the most restrictive of the three options.

As equipment or parts become more widely used underwriters can underwrite the risk with a greater degree of confidence. Generally, underwriters want to see one year or 8,000 operating hours without modifications and without failures to be satisfied. In this scenario, the policy language will exclude coverage for redesign of the failed part. However, the policy will cover the failed part and other damage the failed part might cause, referred to as “ensuing loss or damage.” The policy can also cover the costs incurred to allow repair or replacement of the failed parts and the ensuing loss. Using the example above, this would be the costs associated with the opening and closing of the gas turbine. The policy exclusion that removes coverage solely for the redesign of the failed part or component is referred to as LEG 3, and is the most favorable of the three options.

There is a middle ground frequently encountered where the equipment may have a well recognized operating history; but in an effort to improve some measure of performance, a small modification is made to an individual part. In addition to

excluding coverage for the failed part, the underwriter may also not want to cover the opening and closing costs to repair or replace the failed part. Any ensuing damage to other parts of the machine as a result of the failed part could be covered. The exclusion removing coverage for the failed part and the costs associated with repair or replacement of the failed part, but allowing coverage for the ensuing damage to other parts of the equipment, is designated LEG 2.

Another approach to underwriting new technologies is the "serial loss clause." This wording is used in scenarios where a single insured has purchased a number of pieces of equipment or parts from a single vendor. In this scenario, insurers may have concerns with defects in design or manufacturing that reoccur in the product fleet. The language used allows for claim recovery under the agreed terms of the policy for a first loss. In the event of subsequent losses arising from the same cause, the insurer limits the recovery to a reduced percentage of the otherwise recoverable claim. For example, the insurer may limit recovery to 80% for the second loss, 60% for the third, and so on, until the insurer will not be liable for losses arising from the identified cause.

Finally, underwriters will use these exclusions in concert with deductibles for property damage and waiting periods for business interruption and extra expense coverages to further manage how much of a risk they are willing to take for your project.

Energy plant owners need to know if any of these exclusions apply to the equipment selected for the project. This knowledge will shape the negotiations on warranties and parts and service agreements with equipment vendors and contractors. Lenders will look closely at the interface between insurance and warranties as this defines one aspect of the project risk profile.

Your insurance broker should be able to provide you with specimen forms of the LEG 1, 2 and 3 exclusions, as well as an example of the serial loss exclusion. Contact your WGA Account Executive for more information on securing the broadest property coverage. Or, for more information, please feel free to contact WGA's Renewable Energy and Clean Tech Practice at info@wgains.com.