

## PROJECT DEVELOPMENT/FINANCE RISK ALLOCATIONS

*provided by*

**Robert A. James**

**Pillsbury Winthrop Shaw Pittman LLP**

February 2018

| RISK  | PARTY POTENTIALLY ALLOCATED RISK  | POSSIBLE RISK MITIGATION  | POSSIBLE EFFECT ON LENDER  | POSSIBLE EFFECT ON DEVELOPER  |
|---|---|---|--|---|
| <b>COST OVERRUNS</b>  |   |   |  |   |
| overrun within contractor's control                                     | contractor  | construction contract for guaranteed maximum price (GMP), target price or fixed price                         | creditworthiness of contractor to finish project                       | construction price reflects risk assumed by contractor and costs of security (bonds, completion guaranties)             |
| overrun not within contractor's control - insured event                 | insurance company under policy procured by developer or contractor                              | insurance proceeds  | none if proceeds are sufficient  | none if proceeds are sufficient   |
| overrun not within contractor's control - uninsured force majeure event | developer, who may or may not be able to transfer risk to power purchaser or sponsor government | stand-by developer's equity commitment drawn  | usually none   | equity returns deferred until completion occurs and then reduced  |
| overrun not within contractor's control - change of law                 | developer or power purchaser or sponsor government  | stand-by developer's equity commitment or finance facility drawn until and unless power price adjusted        | stand-by debt facility reduced and unavailable for other contingencies | increased financing costs offset by increased power price, but timing of adjustment may defer and reduce equity returns |
| overrun not within contractor's control - subsurface site conditions    | developer   | stand-by developer's equity commitment drawn  | stand-by debt facility reduced and unavailable for other contingencies | increased financing costs; equity returns reduced   |
| cost overrun - government fault   | power purchaser   | power price adjustment  | increased operating costs until power price adjusted                   | increased operating costs until power price adjusted  |
| cost overrun - operator failure to satisfy operating guaranties         | operator  | performance guaranties in operating agreement; liquidated damages for reduced performance payable by operator | creditworthiness of operator   | creditworthiness of operator  |

| RISK   | PARTY POTENTIALLY ALLOCATED RISK  | POSSIBLE RISK MITIGATION  | POSSIBLE EFFECT ON LENDER  | POSSIBLE EFFECT ON DEVELOPER   |
|--|---|---|--|--|
| <b>COMPLETION DELAYS</b>   |   |   |  |  |
| completion delay within contractor's control                                     | contractor to ceiling; developer or power purchaser thereafter                                  | fixed completion date in construction contract; daily delay liquidated damages to cover debt service, fixed operating costs and fuel supply contract late delivery payments; developer or power purchaser risk above ceiling or if liquidated damages not complete coverage | creditworthiness of contractor to finish project   | construction price reflects risk assumed by contractor and costs of security (bonds, completion guaranties)  |
| completion delay not within contractor's control - insured event                 | insurance company under policy procured by developer or contractor                              | insurance proceeds  | none if proceeds are sufficient  | none if proceeds are sufficient  |
| completion delay not within contractor's control - uninsured force majeure event | developer, who may or may not be able to transfer risk to power purchaser or sponsor government | sample: if cost is less than \$xMM, stand-by finance facility drawn until power price adjustment made; if more than \$xMM, sponsor government pays developer fee, retires debt and assumes project  | stand-by debt facility reduced and unavailable for other contingencies; government credit risk | increased financing costs offset by increased power price, but timing of adjustment may reduce equity returns; if over \$xMM, equity returns reduced |
| completion delay not within contractor's control - change of law                 | power purchaser or sponsor government   | sample: if cost is less than \$xMM, stand-by finance facility drawn until power price adjustment is made; if more than \$xMM, sponsor government pays developer fee, retires debt and assumes project   | stand-by debt facility reduced and unavailable for other contingencies; government credit risk | increased financing costs offset by increased power price, but timing of adjustment may reduce equity returns  |

| RISK  | PARTY POTENTIALLY ALLOCATED RISK                               | POSSIBLE RISK MITIGATION  | POSSIBLE EFFECT ON LENDER  | POSSIBLE EFFECT ON DEVELOPER  |
|---|--|---|--|---|
| <b>PERFORMANCE GUARANTIES</b>   |  |   |  |   |
| failure of contractor to satisfy performance guaranties at completion (potentially conditioned on existence of proven contractor fault) | contractor to ceiling; developer or power purchaser thereafter | performance guaranties in construction contract; liquidated damages for reduced performance payable by contractor | creditworthiness of contractor to pay                                  | creditworthiness of contractor to pay may affect equity returns                             |
| <b>OTHER DEFAULTS</b>   |  |   |  |   |
| operator default  | operator   | damages and termination payments  | operator creditworthiness and coverage ratios affected                 | operator creditworthiness and reduced equity return   |
| power purchaser default   | sponsor government   | developer option to terminate; sponsor government pays debt and equity return to developer                        | government creditworthiness  | government creditworthiness   |
| <b>OTHER RISKS</b>  |  |   |  |   |
| increased interest during construction period   | developer or power purchaser                                   | stand-by finance facility drawn until power price adjustment is made  | stand-by debt facility reduced and unavailable for other contingencies | increased financing costs offset by increased power price, timing may reduce equity returns |
| unfavorable exchange rates during construction period   | developer or power purchaser, which may hedge exposure         | stand-by finance facility drawn until power price adjustment is made  | stand-by debt facility reduced and unavailable for other contingencies | increased financing costs offset by increased power price, timing may reduce equity returns |
| country risk - expropriation, nationalization, interference   | developer, power purchaser or sponsor government               | government pays debt and guaranteed equity return to developer  | government creditworthiness  | government creditworthiness   |
| increased interest, unfavorable exchange rates, inflation during operation period   | developer or power purchaser                                   | power price adjustment  | debt coverage could be affected  | increased financing costs offset by increased power price                                   |
| unavailability/inconvertibility of foreign exchange   | sponsor government   | government pays debt and guaranteed equity return to developer  | government creditworthiness  | government creditworthiness   |
| country risk - expropriation, nationalization, interference   | sponsor government   | government pays debt and guaranteed equity return to developer  | government creditworthiness  | government creditworthiness   |
| equipment destruction during operation period   | contractor or insurance company                                | insurance proceeds  | none if proceeds are sufficient  | none if proceeds are sufficient   |