

POV: Managing COVID-19 Supply Chain Risks

Mission Critical Case Study



A mission critical client relies on long lead time equipment and contractors to support new construction. Communication Overview & Weekly Reports

Approach



Risk Mitigation & Impact Identification is managed by supplier surveys and expedited QBRs

ISG maintains constant contact with over 50 critical supplier / partners globally via:

- Preliminary surveys to all suppliers to understand immediate impact
- Constructing database of key components & partners for perpetual monitoring
- Expedited QBR meetings and request for “push” notifications on supply chain impacts

Equipment



- Preliminary survey focused on risks specific to global manufacturing: manufacturing plant closures or delays, subcomponent, freight & import disruptions
- Country and region of origin for all primary plants and subcomponent plants catalogued
- Database of plant locations constantly monitored against COVID-19 impacted areas

Services



- Preliminary survey focused on risks specific to construction & engineering services: travel policies & restrictions, risk mitigation tactics, possible labor disruptions
- City of origin and active client projects documented for all critical service providers
- Database of personnel origins & active projects constantly monitored against COVID-19 impacted areas

Weekly Supply Chain Dashboard

Potential Coronavirus Supply Chain Risks
USA Equipment Providers

Supplier	Equipment	Manufacturing Risk	Components Risk	Freight Risk	Inventory	Risk Mitigation Plan
Supplier	Switchgear	Mexico, USA	China		Not Required	• Indirect supplier, no dependencies to operations of the line
Supplier	Containers	Texas, USA	China		Not Required	• Only components at risk are LED lights
Supplier	Containers	Louisiana, USA			9 MW	• 9 MW critical components / raw mats held in Louisiana
Supplier	LPS & Switchgear	Japan	Jap. US/ MX		9 MW	• 4.5 MW
Supplier	LPS & Switchgear	USA	Jap. US/ MX		9 MW	• 4.5 MW
Supplier	Switchgear	TX, USA	US		4.5 MW	• 4.5 MW in dedicated inventory
Supplier	Generators	SC, USA & Gem	US/MO/Gen		40.5 MW	• Already selected lead times could worsen due to COVID-19
Supplier	Generators	IN, USA & UK	UK/US/Gen		6.75 MW	• 6 Units available in DE. Subcomponents from USA, UK, Romania
Supplier	Chillers	Mexico			6.75 MW	• 4 new cool and 2 reconnected in CI
Supplier	Chillers	CO, USA	China		Components	• Min. 2-3 week delay expected due to reduced production at plants
Supplier	Floor	China	China	1 wk. delay	9 MW in USA	• Manufacturing facility in China operational, no further known delays
Supplier	Cable Bus	SC, USA	US		9 MW	• Recently implemented 2nd supplier
Supplier	Cable Bus	Canada	USA/UK/Can		Not Required	• New co-primary supplier, inventory program to be established
Supplier	Switchgear	USA	China		40.5 MW	• MO, USA --- TX / OH / SC USA
Supplier	YOLU SITS	VA, USA	2 wk. delay		6.75 MW	• 2 weeks additional lead time for breakers (compacted lead)
Supplier	OTM I	MDTN, USA	US/Gen		18 MW	• 18 MW in dedicated inventory
Supplier	Split Systems	TX/OK/MO, USA	US/Gen		7.5 MW	• Additional 2 MW already in CI
Supplier	Transformers	AZ, USA	US/Gen Risk		Not Required	• 10 MW in dedicated inventory

Potential Coronavirus Supply Chain Risks
USA Contractors & Construction Services

Supplier	Supplier Type	Active Projects	Travel / Labor Restrictions	Project Delay Risk	Key Highlights
Supplier	General Contractor	Multiple			• No foreseeable project delays
Supplier	General Contractor	Multiple		Reduced Labor Force	• Possible labor force reductions within the next five weeks • Equipment delivery routes from China - no delays
Supplier	General Contractor	Multiple	Reduced Economic Travel	Pending Delay	• Energy Commission help path permitting back into state • Site cannot be impacted due to "order in effect" mandates
Supplier	General Contractor	Multiple			• Project allows local team, so travel is not necessary
Supplier	General Contractor	Multiple		Material Delays	• Possible supply chain delays for steel, copper, and aluminum
Supplier	General Contractor	Multiple			• All projects are local, but are currently surveying subs for impact
Supplier	General Contractor	Multiple			• Actively reaching out to subcontractors to determine risk to projects
Supplier	Architect	Multiple			• Transitioning all projects to the Cloud by end of week
Supplier	Engineer	Multiple	Travel Suspensions		• Suspended all work-related travel, but do not foresee any issues in maintaining scheduled deliverables
Supplier	Project Manager	Multiple	Washington Mandate	Pending Delay	• Site cannot be impacted due to "order in effect" mandates • Energy Commission help path permitting back into state
Supplier	Project Manager	Multiple			• No foreseeable project delays
Supplier	Project Manager	Multiple			• No foreseeable project delays