

Reactor Building Concept Assessment

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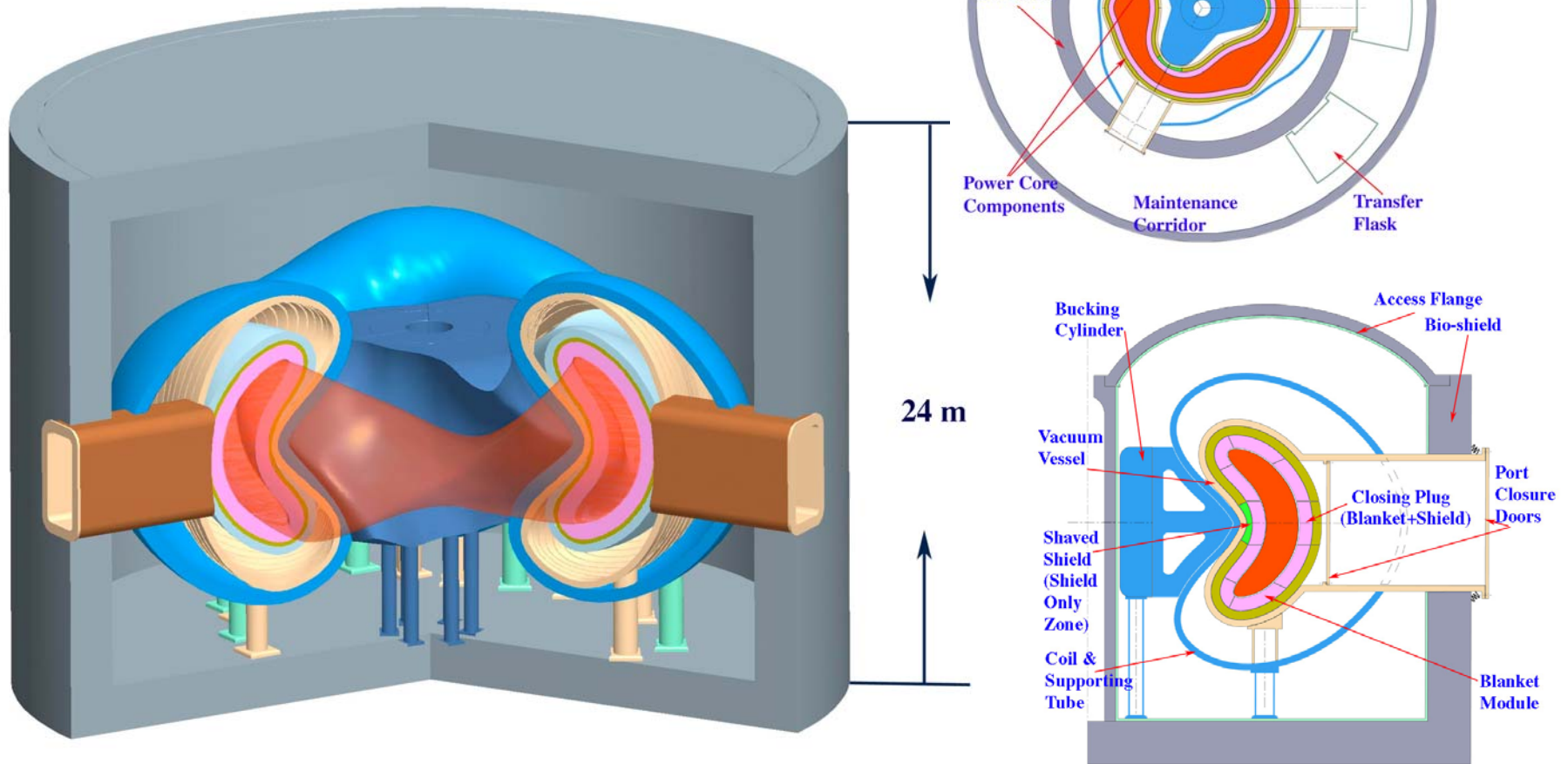
Need to Define Facilities

In order to have a credible cost for the Compact Stellarator Power Plant, we must develop the design approach for our facilities, most notably, the Reactor Building.

- Design is dependent on power core size and configuration**
- Maintenance approach determines Reactor Building features, maintenance equipment, and size**
- Building cost dependent on all of the above**

Power Core General Configuration

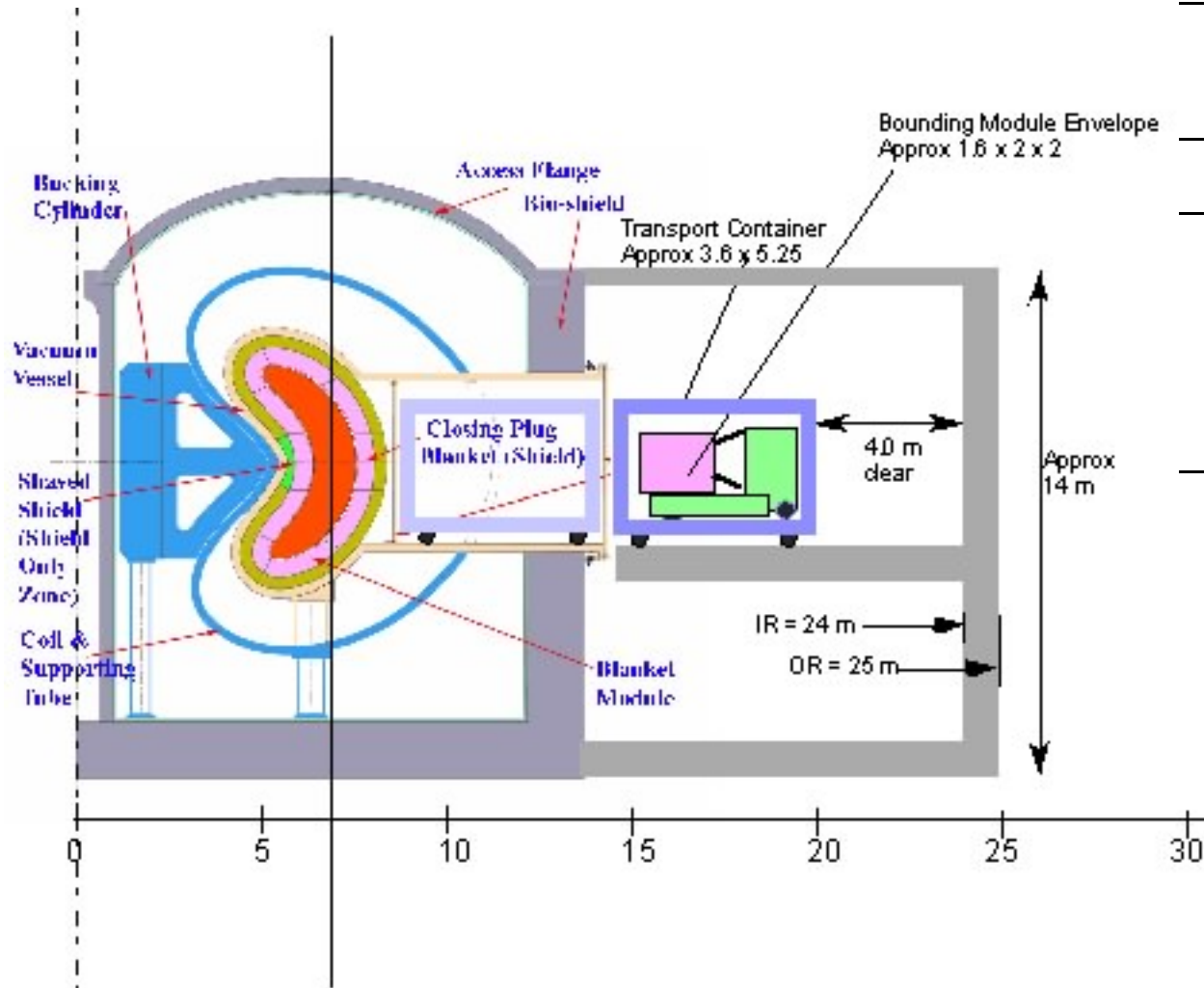
These graphics represent our current 3-field period, port maintenance approach



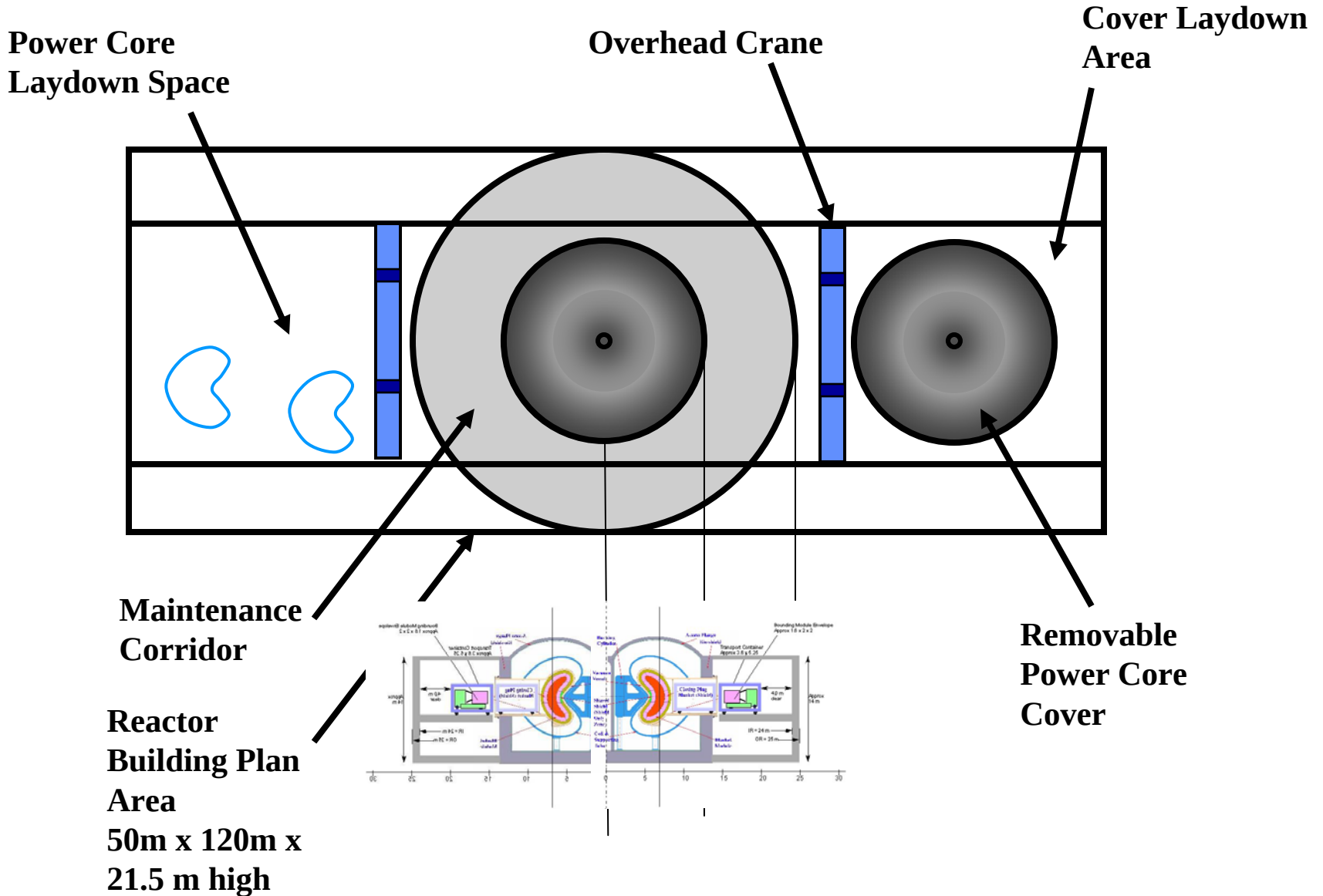
Generalization of Port Maintenance

Assumptions:

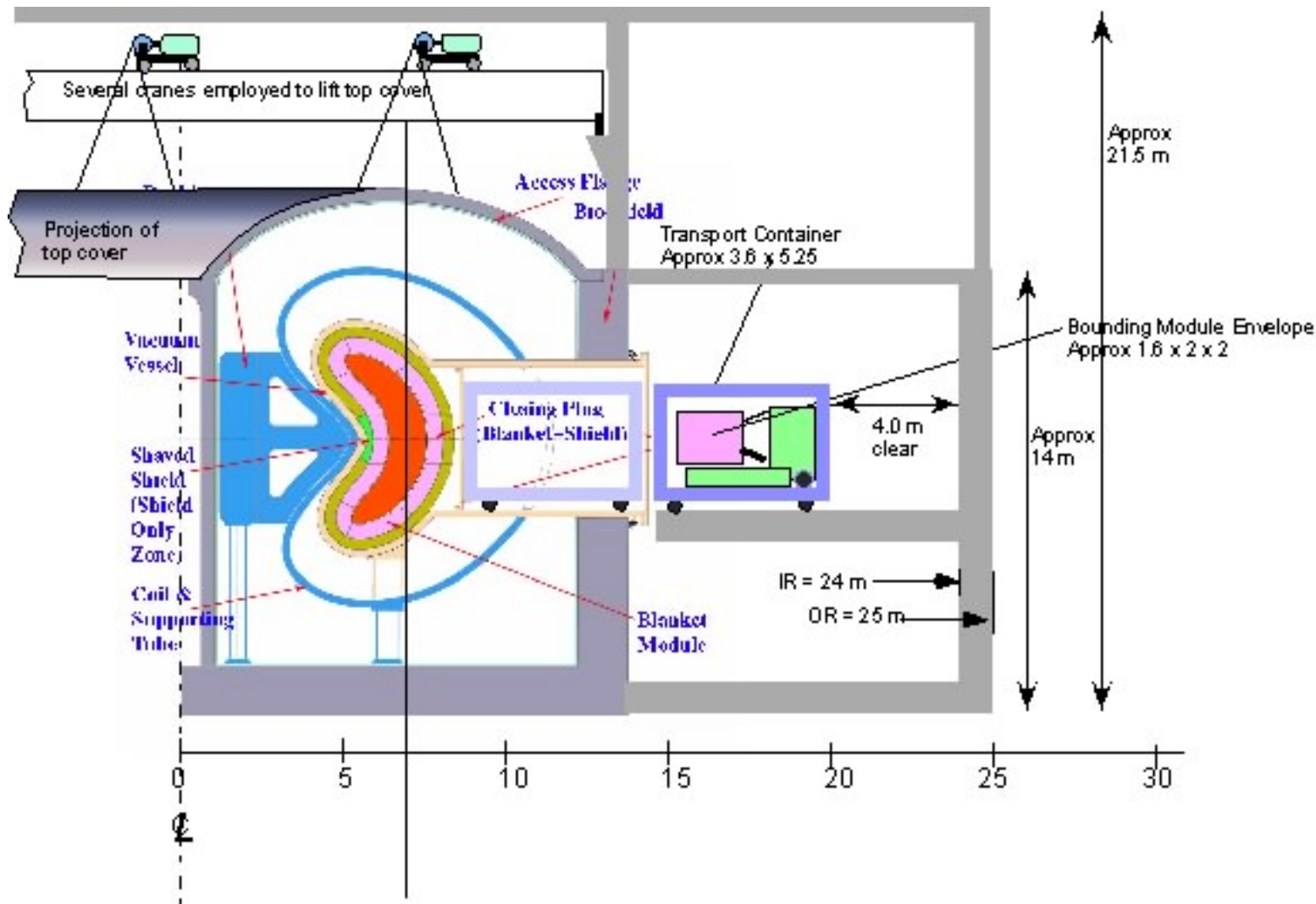
- Enclosed, contained transporter, ala ITER
- Double containment
- Corridor sized to allow passage of another transporter behind docked transporter
- Room below maintenance corridor for ancillary equipment



Definition of Plan Layout



Elevation View Approach



Next Actions

After we decide on the final power configuration and size:

- Refine Maintenance Approach**
- Develop Reactor Building characteristics**
- Work with Xueren on Defining Reactor Building**
- Update Reactor Building Costing Algorithms**