

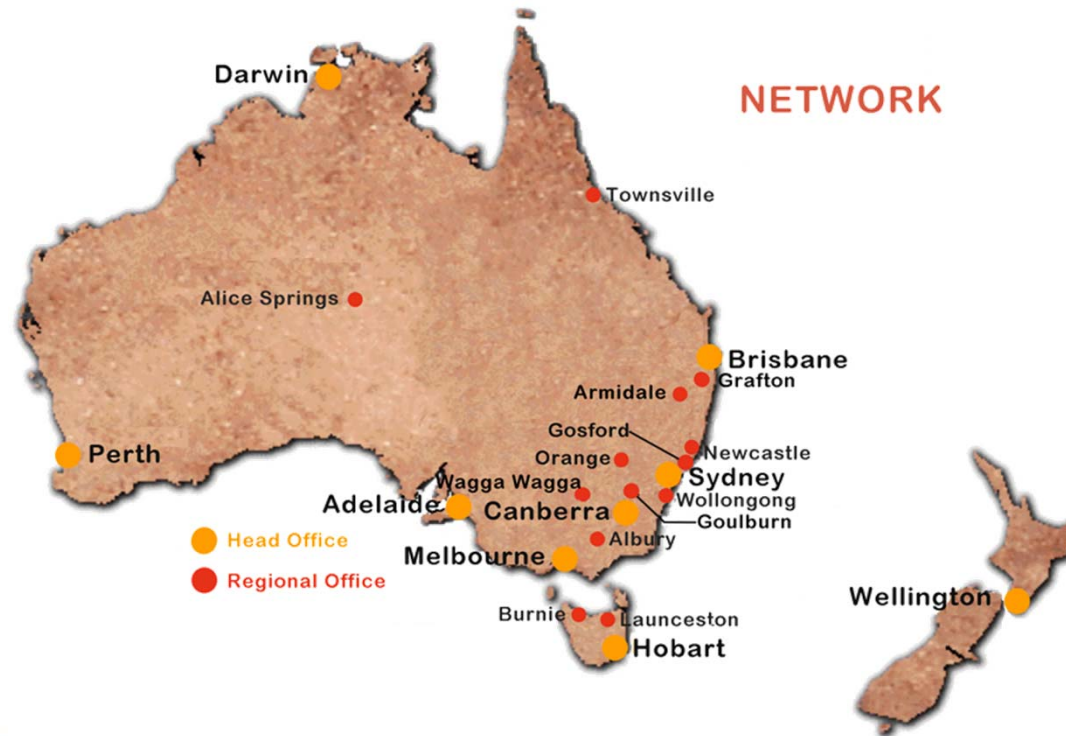
Colby Hauser
ICN WA Senior Consultant

Industry Capability Network

“WHO WE ARE”

ICNWA is part of the **Australian** wide network comprising of:

- 80 Engineers and Supply Chain Specialists
- 24 offices located around Australia and New Zealand
- Share a common data base of over 40,000 companies capabilities.
- Principally funded by State Governments



“WHO WE ARE”

The **Industry Capability Network of Western Australia (ICNWA)** is a specialist Australian vendor identification service provided as a joint Industry and State Government initiative.



WA Government's Department of Commerce is the principal provider of funding to the ICNWA.

The service is managed and operated by the Chamber of Commerce and Industry of Western



CHAMBER OF COMMERCE
AND INDUSTRY
WESTERN AUSTRALIA

WHAT WE DO”

- Professional vendor identification service that assists project proponents & their contractors to identify Australian Industry Capability for projects and link Australian products & services to global supply chains.



Suppliers

Buyers

ICN

ICN ROLE

Our AIM → Identify Competitive Australian Suppliers

- Enhance the tender list to reflect the most competitive capability in Australia at the time
- Thereby,
 - maximising competitive Australian content in projects
 - » minimizing projects costs

“WHO WE WORK WITH”

ICN Assists:

- **Project Managers**
- **Procurement Managers**
- **Operations and Maintenance Managers**
- **Overseas based Tenderers and OEM's**
- **Local Tenderers**
- **Local Suppliers**

Current Major Projects

Browse Basin (*Woodside, Chevron, Shell, BP, BHP Billiton*)

Wheatstone (*Chevron, Apache, KUFPEC*)

Gorgon (*Chevron, ExxonMobil, Shell*)

Shell Prelude FLNG (*Shell*)

Collie Urea (*Perdaman Industries*)

Macedon (*BHP Billiton, Apache*)

Oakajee Port & Rail (*Oakajee Port & Rail*)

Roy Hill Iron Ore
(*Hancock Prospecting, Posco, STX*)

Potential Projects

Pluto 2 & 3 (*Woodside*)

Western Flank (*Woodside*)

Rio Tinto Iron Ore Expansion (*Rio Tinto*)

Rapid Growth Project 6 (RGP6) (*BHP Billiton*)

BHP Billiton Outer Harbour (*BHP Billiton*)

“SERVICES WE PROVIDE”

ICN Services Include:

Vendor Identification

Assistance with AIP Plans

AIP tender clauses

Project Briefings / Workshops

Technology Transfer

Licensing, JV's

What is happening in WA?

- **Oil and Gas, LNG**
 - Exploration
 - Development
 - Upgrades
- **Mining and Minerals**
 - Exploration
 - Development
 - Upgrades
- **Port and Rail Expansion**
- **Chemicals and Fertilisers**
- **Renewable Energy**
 - Wind, Photovoltaic / Solar, and Thermal

Investment in Major WA Projects (DMP figures as at 1 March 2011)

MAJOR PROJECTS

CAPEX \$Million

Commodity	Committed/ Under Construction	Planned	Possible
Alumina	2,737	1,500	
Gold	833	75	228
Iron Ore	22,799	25,808	22,851
Nickel	164	2,705	5,094
Other Minerals, Commodities and Infrastructure	15,261	6,466	11,196
	41,794	36,554	39,369
Crude Oil and Condensate	1,800		
LNG	57,000	72,950	37,000
Gas	6,010	5,615	1,300
Pipelines and Infrastructure	65	800	
	64,875	79,365	38,300
Total Forecast Investment	106,669	115,919	77,669

Current Major WA Projects - Oil & Gas

Under Construction-

Gorgon

Shell Prelude FLNG

Macedon

Wheatstone

FEED Phase-

Browse Basin

Feasibility-

Pluto 2/3

Woodside Expansion – Western Flank / Sunrise

WA Opportunities - Oil & Gas

Gorgon

Downstream EPCM – Kellogg Joint Venture

Major Contractors – CB&I, Leighton, Clough/Sea Trucks JV, CB&I/Kentz JV

Shell Prelude FLNG

FLNG – Technip (Paris) and Samsung Heavy industries Korea

Subsea – FMC and Shell (Kuala Lumpur)

Mooring – SBM (Monaco)

Logistics – Shell Perth

Macedon

EPC – Technip (Perth with support from Kuala Lumpur)

Wheatstone

Downstream Engineers – Bechtel Oil & Gas (Houston)

Browse

Downstream – Two competing Consortia: (CJV) Chiyoda/CB&I/Saipem and (KLH) Kellogg/Leighton/Holland

Current Major WA Projects - Mineral

Under Construction-

CITIC Pacific Sino Iron

BHP Billiton Iron Ore (expansion to 220Mtpa)

Rio Tinto (programmed expansion to 333Mtpa by 2015)

Karara Iron Ore

Koolyanobbing Iron Ore Upgrade

FMG Solomon Upgrade

FMG Cloudbreak Mine

FEED Phase-

Roy Hill Iron Ore

Perdaman Chemicals

Tropicana Gold

Grange Resources

Mid West Iron Ore projects

Feasibility-

Boddington Upgrade

BHP Billiton Iron Ore (outer harbour)

MCC Cape Lambert Iron Ore

Opportunities - Minerals

Selection of Engineering Companies currently involved in the WA Minerals Sector

- AMEC Minproc
- Calibre Global Pty Ltd
- Engenium
- FAST - Fluor SKM Iron Ore Joint Venture
- Fluor Australia Pty Ltd
- GHD
- GR Engineering
- Jacobs (acquired by Aker Solutions)
- Hatch Associates Pty Ltd
- Lycopodium
- Sinclair Knight Mertz (SKM)
- SNC-Lavalin Australia Pty Ltd
- Onyx Projects
- ProMet Engineers
- Proteus (acquired by Tetra Tech)
- WorleyParsons

Challenges to Local Suppliers

- **Offshore Engineering and Procurement**
- **Global tendering**
- **Offshore Investment in WA projects**
- **Tender/Contract package size**
- **Modularisation**

**How can my company get
involved in these Projects?**

1) Register a profile online

**2) Register your interest
against specific packages.**

Online Registration System – Browse LNG Development

Woodside has opted to use ProjectConnect as their online registration system for the Browse LNG Development

Packages will be **dual listed** on both **ICN Gateway** and **ProjectConnect**

Only one registration on either system will be sufficient, as we will be checking both to determine interested companies.

Vendor Identification Process

1. Project owner's EPC lists packages on the project's online system
2. Australian Suppliers register 1st or 2nd tier
3. 1st tier registration closes and ICNWA commences enquiry work
4. ICNWA reviews 1st tier supplier registrations and supplier information from other sources
5. ICNWA nominates suppliers capable for 1st tier work to EPC
6. EPC builds supplier list for package including ICNWA's nominated suppliers
7. EPC issues tender to supplier list and awards PO
8. EPC lists successful Tenderer on Online triggering an email to 2nd tier registrants

How ICN Works

ICNWA's Professional Vendor Identification Process



Prequalification Requirements

- ✓ Number of Employees
- ✓ Workshop Information
- ✓ Subsidiaries & Affiliates
- ✓ Major Experience
- ✓ Licensing Agreements
- ✓ Product Information
- ✓ Quality Systems & Certification
- ✓ Work Load
- ✓ Technical Support

Browse LNG Development



Woodside is the major equity holder (46%) and Operator of the Browse LNG Development, which is an important part of Woodside's LNG production growth plans. Browse also represents substantial opportunities for economic and social development in the Kimberley region of Western Australia.

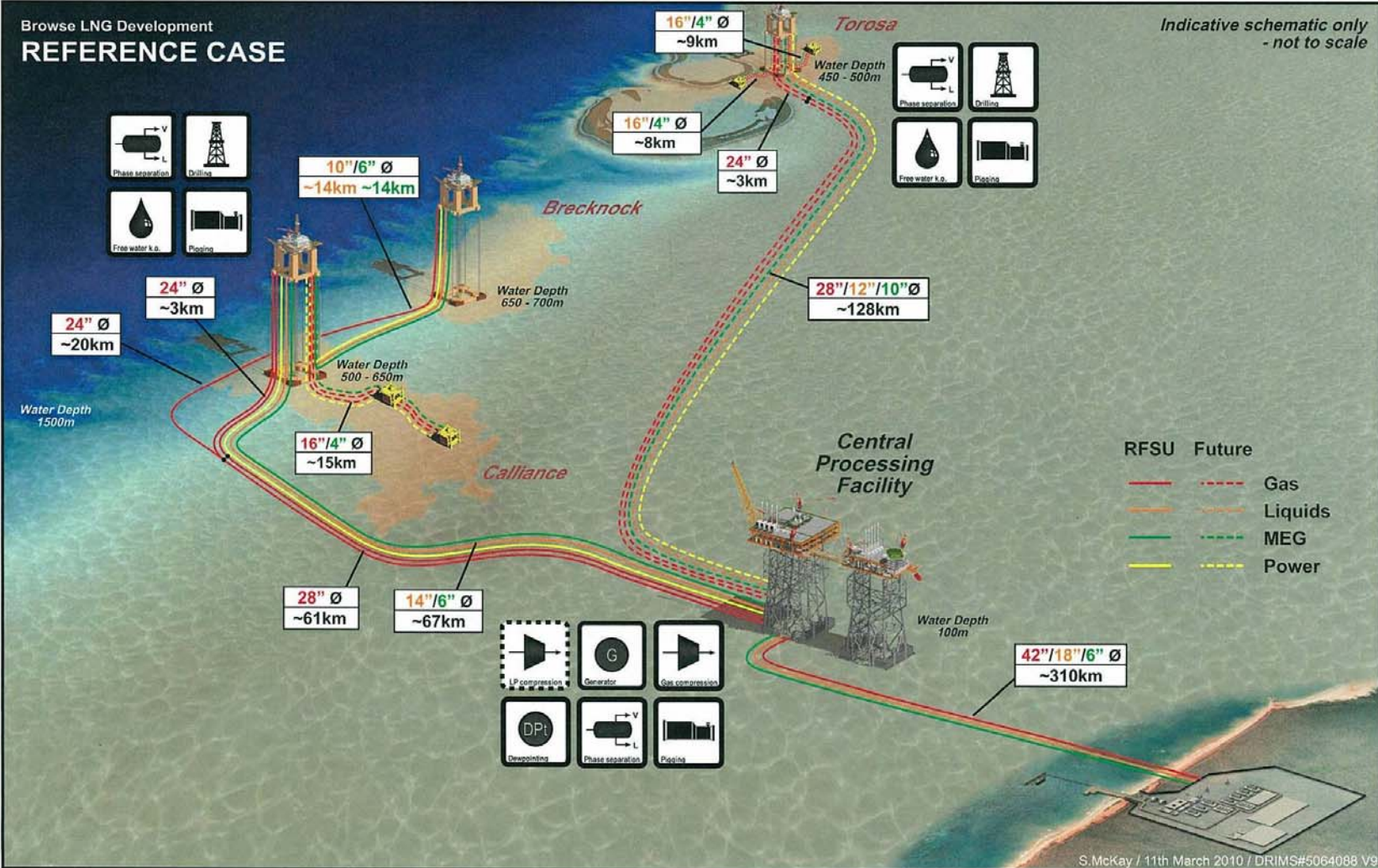
The Browse Joint Venture consists of Woodside, Shell Development Australia, BP Developments Australia, BHP Billiton Petroleum (North West Shelf) and Chevron Australia.

The Browse LNG Development concept is to commercialise the Browse Joint Venture's three gas and condensate fields, **Brecknock, Calliance and Torosa**, located approximately **400km off the Kimberley coast**. Gas and liquids from these fields will be brought to an onshore 12mtpa LNG plant at the Western Australian Government's proposed **Browse LNG Precinct, 60 km north of Broome**.

The Browse LNG Development's three fields contain a combined contingent resource of 13.3 tcf of dry gas and 363 million barrels of condensate.

Browse LNG Development
REFERENCE CASE

Indicative schematic only
- not to scale



BROWSE LNG DEVELOPMENT - UPSTREAM REFERENCE CASE



CURRENT BROWSE ACTIVITY

The Browse LNG Development is currently entering the front end engineering and design phase (FEED). Woodside's Board approved **FEED entry in February 2011** and FEED contracts have been awarded for the major pieces of infrastructure required to build Browse.

The development has initiated a **competitive dual FEED** process for the onshore LNG plant and the offshore Tension Leg Platforms.

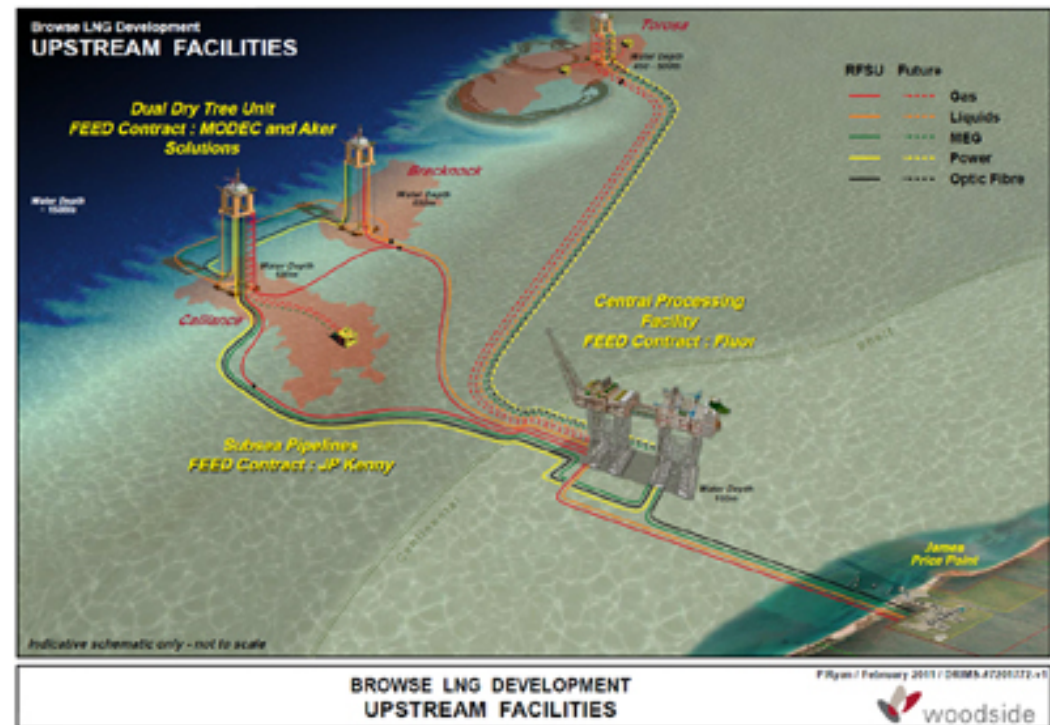
Basis of Design studies were completed November 2010, on schedule and to budget.

Woodside is working closely with Traditional Owners and the Western Australian Government to negotiate an agreement that will secure land access for the Development at James Price Point. An agreement would include a significant benefits package for Kimberley Indigenous people, which provides training and employment opportunities on the development, and opportunities for local Indigenous businesses.

By the **end of 2011** Woodside expects that primary **environmental approvals** will have been **obtained**, a land access agreement secured, and **FEED completed**. By achieving these milestones, the Browse Joint Venture will be in a position to make a **final investment decision by mid-2012**, and process **first gas from Browse by 2017**.

UPSTREAM FACILITIES

- Two deepwater tension leg platforms in approximately 500-700m of water
- Central gas processing and compression facility in approximately 100m of water
- 326km of interfield pipelines
- 930km of export pipelines



UPSTREAM ACTIVITY

Contractors

Dry Tree Units

One Dry Tree Unit (DTU) is located over each of the core areas of the Calliance and Brecknock fields and will be configured as a Tension Leg Platform (TLP).

The EPC(I) contractor for the DTUs is to be selected through a competitive process which is currently underway with award for detailed design scheduled for late 2011.

Contractors:

Modec

Aker Solutions (Kvaerner)

Central Processing Facility (CPF)

Fluor Corporation is currently executing the FEED scope of work for the CPF.

The tender process for the engineering, procurement and design of the topsides and substructure has commenced with contract award scheduled for Q2 2012.

Subsea and Pipelines

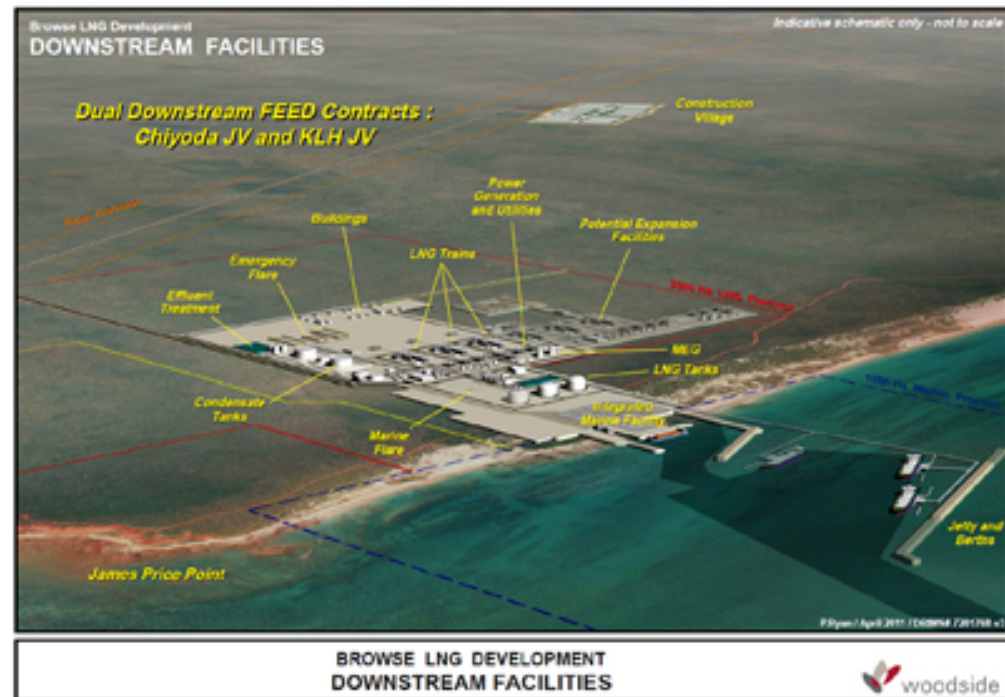
JP Kenny is currently performing the subsea and pipelines FEED scope.

The tender process for pipelines installation has commenced with contract award anticipated for Q2 2012. The tender process for pipelines intervention / stabilisation and shore crossing scopes of work is planned to commence during the second half of 2011 with contract award anticipated for Q2 2012.

DOWNSTREAM FACILITIES

Downstream Facilities

- 12mtpa, three train LNG plant and associated utilities
- Condensate facilities
- Integrated port, shipping and LNG and condensate loading facilities
- LNG and condensate storage
- Accommodation facilities for up to 6000 people
- Temporary Offsite Workers Camp for 600 people, near Broome
- Broome Laydown Area (Broome Port)



DOWNSTREAM ACTIVITY

Contractors

Downstream dual FEED contractors:

CJV (Chiyoda Corporation, CB&I and Saipem S.p.A)

KLH JV (Kellogg Brown and Root (KBR), Leighton Contractors and John Holland)

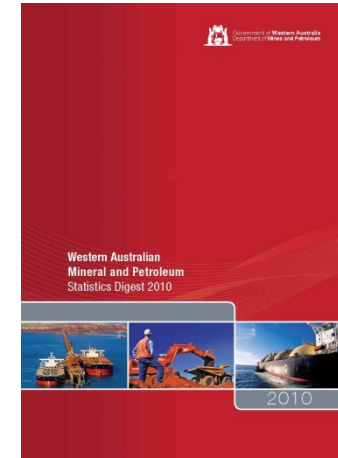
PROJECT TIMING

- Following the Project **financial investment decision (FID)**, which is targeted for **mid year 2012**, the contracting strategy is to select one of the existing dual FEED contractors(both upstream and downstream) to execute the full scope under a **single EPC contract**. The EPC contract will be comprised of **fixed costs** where the risks can be reasonably quantified by the contractor.

State Government Publications

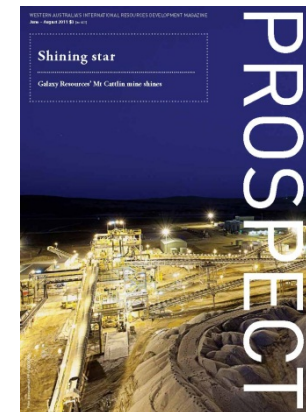
Statistics Digest

www.dmp.wa.gov.au/documents/StatsDigest2010a.pdf



Prospect magazine

www.dmp.wa.gov.au/documents/Prospect_June_2011.pdf



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