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Figure 1: Work package structure

# 1 Summary

This chapter describes the comprehensive procurement processes including extensive due diligence applied to select the construction contractors (Civil and Electrical/Mechanical (***E&M***)) as well as service providers required to support the project development. This chapter also describes activities undertaken to ensure high probity standards have been maintained throughout the procurement process.

The procurement processes applied for the Project have been established based on best industry practice, advice from a range of experienced procurement advisors and input from the major contractors. The processes have been focusing on generating maximum value for Snowy Hydro by leveraging competition between world-class contractors. The Project's probity advisor, O'Connor Marsden, has provided sign-off on the adequacy of the probity standards applied.

## 1.1 Introduction

Snowy Hydro commenced its procurement process for the Project in early 2017. The process has progressed through an Early Contractor Consultation (**ECC**) phase, an Expression of Interest (**EOI**) phase, progressive shortlisting, and issue of formal tenders. As at Final Investment Decision (**FID**), tenders have been received with binding bids and comprehensive evaluations undertaken. The binding tender prices have been used in the FID business case. Subject to approval, further evaluation and negotiation will take place after FID to improve the cost and risk allocation inputs in the FID business case, with the target for Main Works contracts award being March 2019.

This chapter details the ongoing procurement process to select preferred contractors for the two contract packages for the Main Works for the Project (Civil Works and E&M Works and the Exploratory Works package (Roads and Balance of Exploratory Works). It also describes more generally the procurement process that has been undertaken through the course of the Project development.

## 1.2 Activities undertaken

### 1.2.1 Overview

The key steps taken in the procurement process have been:

1. Strategy development and risk identification, assessment and management;

2. Market engagement (EOI);
3. ECC;
4. Civil shortlisting;
5. Testing of scale models of the proposed turbine designs;
6. Comprehensive due diligence of the bidders across technical, quality, commercial and reference projects;
7. Civil and E&M tender;
8. Exploratory Works - Roads (***EWR***) tender; and
9. Monitoring of probity standards.

There are five main areas of scope to be delivered for the Project:

1. EWR;
2. Exploratory tunnelling work (***Exploratory Works***);
3. Civil infrastructure and E&M works (***Main Works***);
4. Geotechnical investigation; and
5. Owner's advisors.

### 1.2.2 Exploratory Works and Main Works

The Exploratory Works and Main Works were managed as a single package for procurement. The procurement strategy was determined by the following key objectives:

1. Ensuring appropriate input from potential contractors via a market sounding;
2. Packaging of scope to reflect contractor expertise;
3. Ensuring contractors engaged in the process are capable of delivering complex projects;
4. Ensuring that the overarching procurement process is fit-for-purpose;
5. Ensuring high probity standards are delivered;
6. Leveraging contractors' knowledge throughout the procurement life cycle;
7. Maximising benefits from the competitive tension between contractors;
8. Ensuring that the contract and pricing models reflect Australian market norms; and
9. Building relationships for the execution phase.

Snowy Hydro decided to involve potential contractors at an early stage of Feasibility through its ECC process. The purpose of the ECC process was to draw on the construction experience and capabilities of contracting and manufacturing firms, which could then flow into the feasibility design and later into the definition of the Employer's Requirements. Snowy Hydro's primary goals in this process were to identify and reduce overall Project risks through contractor input to cost estimate, schedule, and constructability, and reduce the overall Project schedule.

More than 20 companies were approached to gauge interest in being involved in the ECC process. These companies were identified through a process involving internal subject matter experts and advice from external consultants.

Snowy Hydro Senior Executives and SMEC Australia Pty Ltd (***SMEC***) (as Owner's Engineer) gave a market briefing presentation in early 2017 to companies which expressed interest.

EOI documentation was issued to companies which attended the market briefing. This documentation requested key information to allow selection of companies to proceed to the ECC phase. Submissions were evaluated by a cross-functional team against defined criteria. Respondents gave presentations to supplement their submissions.

The purpose of the ECC process was to seek input from contractors on the emerging design and create early awareness of the Project. Contract packages were presented back to the ECC contractors for discussion. The parties worked collaboratively to facilitate submission of a Feasibility Study report to the Snowy Hydro Board in December 2017.

The ECC process also included reviewing design documentation with feedback loops from each contractor to capture issues, identify cost drivers and opportunities, value engineering and requests to the contractors on:

1. Geotechnical investigation planning;
2. Cost and Schedule;
3. Technical feedback on proposed solutions;
4. Proposed boundary limits; and
5. Identification of Early Works Packages to facilitate an accelerated program.

After the completion of the Feasibility Study, it was decided to reduce the shortlist of Civil contractors and Snowy Hydro issued a detailed Request for Information (***RFI***) to the Civil contractors to enable a shortlisting decision.

The Civil contractors each submitted detailed, high-quality submissions, and the Project team undertook extensive due diligence including reference checks. Following this, Snowy Hydro shortlisted and invited the civil tenderers to proceed to the full tender stage.

In this period, Snowy Hydro undertook E&M technical due diligence focusing on machine capability specific to the Project duty and initiated a tender development phase with all tenderers.

Throughout the tender process, Snowy Hydro and the individual tenderers collaborated in confidential forums designed to clarify the Employers' Requirements (as documented in the tender package) and supplied information, shared knowledge, expertise and improve the certainty of delivery. Detailed engagement also took place on the proposed contracting model and project risk identification and allocation under the contracting model (see also *Supporting Chapter Three - Contracts and legal* and *Supporting Chapter Seventeen - Risk*).

Following this process, Snowy Hydro appointed of Voith as the preferred E&M supplier for the project and received 'not to exceed' pricing for the E&M component. As at FID, work is continuing to achieve a 'contract wrap' between the Civil tenderers and Voith.

As at FID, the initial evaluation of the Civil tenders with binding bids including 'not to exceed' pricing was complete, and formal clarifications and negotiations with the tenderers in progress. The negotiations have reached a stage where certainty has been achieved on the capital cost estimate and contract risk positions underpinning the FID business case. It is proposed that work with the tenderers

 

continue to further leverage the competitive tension to improve the price and contractual outcome from the FID position.

An external probity consultant was appointed to provide a risk assessment and health check of the procurement process to date.

After a detailed review of the process and documentation, Snowy Hydro received an independent report confirming that the process has been fair and equitable to all tenderers and that no breaches of probity standards were identified.

### 1.2.3 Other procurement activities

A targeted geotechnical investigation was undertaken during the Feasibility study. Based on the findings, a decision was taken to expand the scope of the geotechnical work, and an extended Geotechnical Investigation Program (***GIP***) commenced in October 2017. The outcomes assisted with the refinement of the project design and enabled the development of the Geotechnical Baseline Report (***GBR***).

As noted in the Feasibility Study Report, Snowy Hydro identified an opportunity to de-risk the Project through undertaking some Exploratory Works (in addition to the geotechnical investigations underway) prior to award of the main EPC Contract(s). These works are primarily civil in nature, involving the development of access roads and work areas, and would be limited to activities that can clearly be characterised as exploratory in nature.

Following the review of timelines, commencement of the Exploratory Works was scheduled for February 2019.

A standalone procurement process has been conducted for an EWR scope design to improve the overall Project schedule. As at FID, the EWR bids have been fully evaluated and a recommendation for preferred bidder approved.

Through the course of the Project, Snowy Hydro has sought out a range of advisors to help Snowy Hydro develop the Project and fulfil its responsibilities. On some occasions, a competitive process was precluded by the specialist nature of the services.

## 1.3 Procurement status as at FID

As at FID, there remains the opportunity for Snowy Hydro to further improve its outcomes from the tender processes by continuing to leverage the competitive tension between tenderers. This work will be carried out in early 2019 with final contracts targeted for completion by the end of March 2019. The 'not to exceed' cost and contract positions underpinning the business case at FID are binding and locked in with the tenderers and the continuing negotiation process will only improve Snowy Hydro's outcome from the FID position.

As at FID, the status of each scope procurement area is as follows:

1. **Exploratory Works**

   a. **Access Roads** - A preferred bidder has been chosen and contract negotiations are being finalised. See *Supporting Chapter Thirteen - Early and Exploratory Works* for a scope description;
   b. **Balance of Works** - Snowy Hydro has received and is evaluating tenders for the balance of Exploratory Works (as part of the Main Works - Civil tender);
2. **Geotechnical investigation** - an investigation was initiated in Q1 2017 and has continued since. The current scope of work is expected to be completed by the end of 2018. Further drilling work will be considered on the basis of the impact on incremental risk reduction to Snowy Hydro;
3. **Main Works**
   a. **Civil works** - Bids have been received and initial tender evaluations complete. Binding price and contractual positions have been reached that underpin the FID business case. Work is continuing with the tenderers to further improve on Snowy Hydro's outcome from the tender submissions;
   b. **E&M Works** - Bids have been received from the tenderers and fully evaluated. A preferred bidder has been appointed and a Heads of Agreement executed. Discussions are in progress to achieve a contract wrap that brings together the Civil and E&M scopes (E&M provider appointed as a subcontractor to Civil provider);
4. **Owner's advisors** - A number of Owner's advisors (including Owner's Engineer SMEC) have been progressively engaged since early 2017.

It is anticipated that negotiations on the Main Works packages will be complete and contracts will be ready for execution by the end of March 2019.

## 1.4 Regulatory considerations

The Project is subject to Commonwealth and NSW legislation applicable to construction projects. From a procurement and contracting perspective, the two main relevant Acts are the *Australian Jobs Act 2013 (Cth)* (**Jobs Act**) and NSW Security of Payment legislation.

The *Jobs Act* supports the creation of and retention of Australian jobs by requiring public and private major projects in Australia with a capital expenditure of $500 million or more to prepare and implement an Australian Industry Participation (***AIP***) Plan.

Snowy Hydro has complied with the requirements of the Jobs Act.

The security of payment legislation in NSW consists of two acts: the *Building and Construction Industry Security of Payment Act 1999* (NSW); and the *Contractors Debts Act 1997* (NSW) (largely superseded). The Acts generally affect payment terms.

The Acts' requirements will be reflected in the payment terms of the contracts and in contract administration procedures. See *Supporting Chapter Fourteen - Project controls.*

In mid-2018, the Commonwealth acquired 100% of the shares in Snowy Hydro, and as a consequence, Snowy Hydro became subject to the *Public Governance*

*Performance and Accountability Act 2013* (**PGPA Act**). However, Snowy Hydro has not been prescribed to be an entity subject to the Commonwealth Procurement Rules under s105B of the PGPA Act and s30 of the PGPA Rules. Although Snowy Hydro is not required to comply with the Commonwealth Procurement Rules, the procurement process described in this chapter has been designed in accordance with best practice and high standards of probity.

## 1.5 Procurement and contract management

In the execution phase, Snowy Hydro's Owner's Team will manage the Main Works Civil contract (which will include the wrapped E&M provider).

Primary procurement and contract functions include:

1. **Sourcing (for owner's contracts)** - While the sourcing of the main contracts will be largely concluded as at FID, there will be an ongoing need to contract with various specialist firms and owner's advisors. The execution approach will be determined and documented in the Project's Procurement and Contracting Plan (***PCP***), as part of the overall Project Execution Plan (***PEP***);
2. **Contract implementation** - there will be an implementation period for the main contracts, to be documented in a contract implementation plan post-FID; and
3. **Contract management** - roles and responsibilities will be detailed in the PCP. Structured processes will be documented and adopted for contract management activities such as mobilisation, progress payments, cost management, claims management and change management.

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# 2 Activities undertaken

## 2.1 Overview

The key steps taken in the procurement process have been:

1. Strategy development and risk management;
2. Market engagement (EOI);
3. ECC;
4. Civil shortlisting;
5. Testing of scale models of the proposed turbine designs;
6. Comprehensive due diligence of the bidders across technical, quality, commercial and reference projects;
7. Civil and E&M tenders;
8. Exploratory Works - Roads (***EWR***) tender; and
9. Monitoring of probity standards.

## 2.2 Scope of procurement activity

There are five main areas of scope to be delivered for the Project as shown in Figure 1 below:

1. **Civil Infrastructure works** - (tunnels, caverns, shafts, etc); (See *Supporting Chapters Twelve* and *Fifteen*);
2. **E&M works** - (supply, installation and commissioning of the turbines, etc.) (See *Supporting Chapters Twelve* and *Chapter Fifteen*).
3. **EWR** (see *Supporting Chapter Thirteen*) - Access roads to allow access to key points on the site (access tunnel, site compound, shaft locations, intermediate access points, intakes at each end;
4. **Geotechnical investigation** - Borehole drilling and core testing work; program to establish geotechnical conditions for the underground tunnelling and mass excavation works; and
5. **Owner's advisors** - various services, consultancy and support packages, including SMEC as Owner's Engineer.

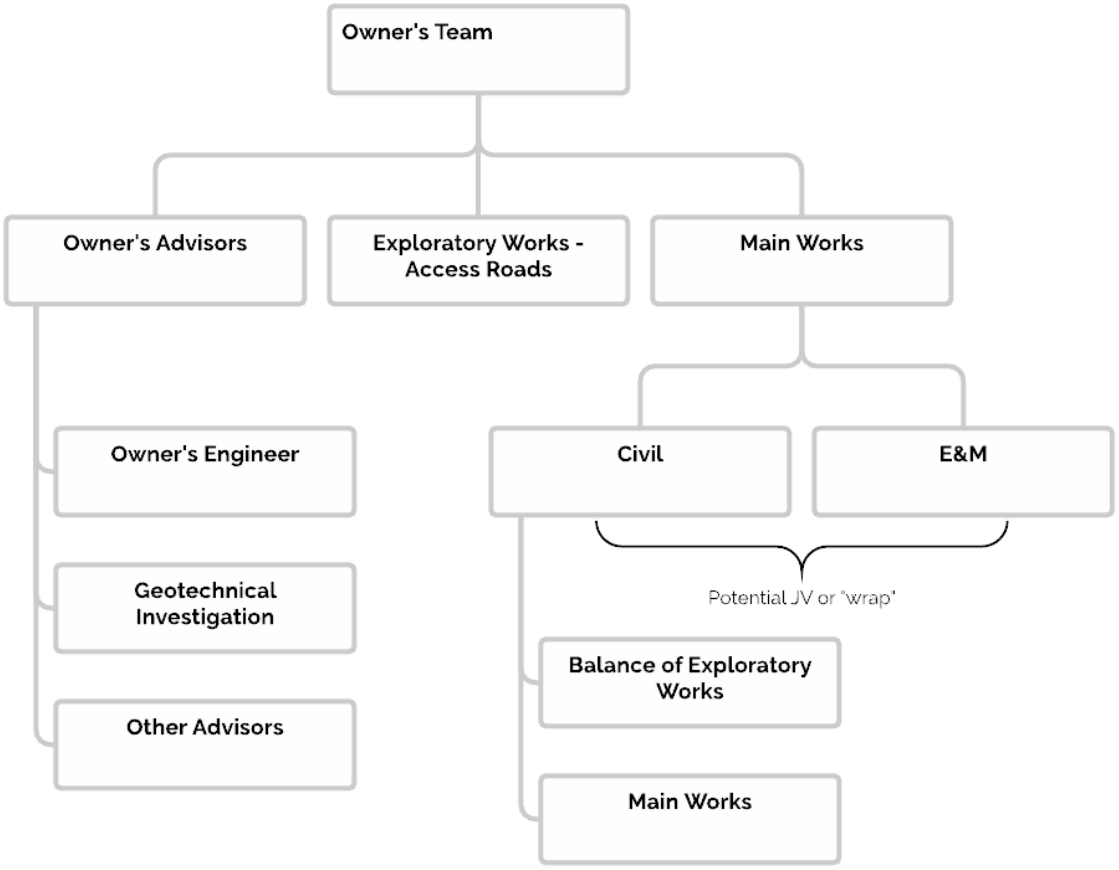


**Figure 1: Work package structure**

## 2.3 Strategy development

### 2.3.1 Overview

The procurement strategy was determined by the following key objectives:

1. Ensuring appropriate input from potential contractors via a market sounding;
2. Packaging of scope to reflect contractor expertise;

3. Ensuring contractors engaged in the process are capable of delivering the Project's complexity;
4. Ensuring that the overarching procurement process is fit-for-purpose;
5. Ensuring high probity standards are delivered;
6. Leverage contractors' knowledge throughout the procurement life cycle;
7. Maximising benefits from the competitive tension between contractors;
8. Contract and pricing models reflect Australian market norms;
9. Recognised contractual instrument, risk allocation framework and negotiation objectives, pricing model; and
10. Building relationships for the execution phase.

### 2.3.2 Focus on capable contractors

The Project is high-profile, attracting interest from a wide range of contractors. However, there are few contractors who have proven execution capability for a project of this scale and complexity. Therefore the process has been focusing on civil contractors who are truly capable of executing the project. The E&M contractors participating in the process are the recognised technology leaders globally.

### 2.3.3 Leverage contractors' knowledge throughout the procurement process

Snowy Hydro's approach to the Project has been to maximise benefits from interactions with others who have recent experience. It was recognised early in the Project that the civil contractors and E&M contractors bring a wealth of knowledge and experience. The Procurement strategy was designed to tap into this experience, in particular through the ECC process, with a particular focus on enhancing project definition and construction methodology.

### 2.3.4 Maximising benefits from the competitive tension between contractors

Strong competition is an important determinant of innovation in design and in cost positioning. The procurement process was designed to encourage competition and maintain competitive tension for as long as possible into the process to optimise Snowy Hydro's technical and commercial positions.

The attractiveness of the Project in the market was affirmed by the high level of interest by prospective contractors shown in the initial market engagement and EOI rounds.

An extensive process of site visits, collaborative workshops, reviews and requirements clarification was incorporated in the process (see *Supporting Chapter Twelve* for the various technical due diligence activities).

For the Project's ECC process, the Civil contractors were not required to conduct design work of any significance but rather were requested to provide commentary and feedback on work undertaken by Snowy Hydro and its advisors including constructability of the baseline design and the implications for the cost estimate and construction schedule.

The hydraulic requirements associated with the Project's power waterway are demanding and there are only a small number of plants operating in the world

under similar conditions. Part of the ECC process for the E&M package was the evaluation of the contractors' technical capability to meet Project requirements. This evaluation included the development and testing of scale models of the proposed turbine designs. In order to maintain competition through the evaluation phase, models were developed by all four E&M contractors.

### 2.3.5 Contract and pricing models reflect Australian market norms

Close attention was paid to designing a market-acceptable, and appropriately priced risk allocation (see *Supporting Chapter Three*).

The contract document (modified International Federation of Consulting Engineers (***FIDIC***) EPC/Turnkey (***Silver Book)***) is described in *Supporting Chapter Three*. Discussions were undertaken with the contractors to get their input into the selection of the form of contract ensuring that risk allocation provisions were known and acceptable to the contractors.

The Project will require the development of over 50 km of tunnels. A comprehensive geotechnical investigation program was undertaken but the full geotechnical conditions across this distance cannot be fully known until the tunnel work is completed, this is standard for tunnelling projects. Allocation of cost risk associated with the geotechnical conditions has been based on a GBR model which is well known and understood by the contractors (see *Supporting Chapter Three*).

### 2.3.6 Rigorous and transparent process

Delivering the Project with a high standard of probity controls has been a key objective of the Owner's Team. An independent third party probity advisor with deep experience in large infrastructure projects was appointed to support the Project. Detailed updates have been provided to the probity advisor through the course of the tender. Full access to project documentation has also been provided to the probity advisor. The procurement process has been designed as a rigorous and transparent process to ensure that all ECC contractors are treated equally and that principles of competition guide all decision making.

The process was run with close attention to consistency, transparency and probity, with formal probity review and advisory brought into the process (see *Commercial due diligence and probity* below). The probity advisor has confirmed that they are comfortable that the process has been open and transparent and that all ECC contractors have had an equal opportunity to compete.

The contracting process follows a logical series of steps, from initiation and establishing key milestone dates, to scope definition, Principal Contractor selection and contract/project control.

The successful procurement of qualified contractors able to take on the position of Principal Contractor and deliver a high-profile project required a well-defined process. The process had to thoroughly test contractor capacity and capability.

### 2.3.7 Risk identification, assessment and management

As a key part of the procurement strategy comprised a detailed procurement workstream risk identification, assessment and management. This was undertaken working closely with the legal and contracting workstream and external risk advisers.

In procurement, risk management focuses on two main aspects - process risk and management (through allocation by contract) of key project risks. This required detailed work across the Project and with tenderers through the ECC and tender processes to identify and agree on the appropriate management of risks, in particular, the risk allocation provisions in the Engineer-Procure-Construct (***EPC***) contracts and the cost-effectiveness of risk transfer.

This is an ongoing process that informs contract and negotiating strategy and must respond to market feedback on the proposed risk allocation which in turn informs which risks are retained and informs other processes such as funding, contingency and insurance.

Further detail on risk identification assessment and transfer is in the relevant supporting chapters, in particular, *Chapter Three* (contract risk allocation) and Chapter *Seventeen* (risk management process).

## 2.4 Market engagement (EOI)

### 2.4.1 Overview

On the basis of experience and advice from internal and external advisors, more than 20 companies were identified as potential ECC contractors in the Project procurement processes.

Snowy Hydro Senior Executives and SMEC gave a market briefing presentation to companies who expressed interest.

EOI documentation was issued to companies who attended the market briefing. This documentation requested key information to allow selection of companies to proceed to the next phase (ECC).

Submissions were evaluated by a cross-functional team against defined criteria. Respondents gave presentations to supplement their submissions.

### 2.4.2 Expression of Interest

A Request for EOI was formally issued to all attendees following the market briefing.

The EOI covered a broad range of relevant capabilities, including financial and delivery capabilities.

Snowy Hydro and SMEC representatives formed a multi-functional assessment team. The written submissions were evaluated across relevant criteria relating to financial and delivery capabilities.

Respondents were also invited to present their submissions to the assessment team and the presentations were similarly evaluated.

On the basis of these evaluations, the assessment team selected a number of Civil and E&M contractors to participate in the ECC phase of the project.

## 2.5 Early Contractor Consultation

### 2.5.1 Overview

Snowy Hydro decided to involve potential contractors at an early stage of the Feasibility Study as part of its ECC process. The purpose of the ECC process was to draw on the construction experience and capabilities of contracting and manufacturing firms, which could then flow into the feasibility design and later into the definition of the Employer's Requirements. Of particular interest was the opportunity to capitalise on tunnelling and underground excavation methods successfully adopted for similar projects (see *Supporting Chapter Twelve*) and on the latest advances in the design and manufacturing of electrical and mechanical pump/turbine and electrical generating plant implemented on high-head, large-flow pump storage projects worldwide.

The ECC process involved Snowy Hydro providing technical information to the contractors on the design and project deliverables as they developed and then requesting feedback from, and working collaboratively with, the contractors on the key issues relevant to the Project. The parties worked collaboratively to facilitate submission of a Feasibility Study report to the Snowy Hydro Board in December 2017.

The ECC process also included reviewing design documentation with feedback loops from each contractor to capture issues, identify cost drivers and opportunities, value engineering and requests to the contractors on:

1. Geotechnical investigation planning;
2. Cost and Schedule;
3. Technical feedback on proposed solutions;
4. Proposed boundary limits; and
5. Identification of Early Works Packages to facilitate an accelerated program.

## 2.6 Shortlisting Civil contractors

### 2.6.1 Overview

After the successful completion of the Feasibility Study, a decision was taken to further shortlist the Civil contractors. This shortlisting decision was taken to:

1. Ensure that tenderers were fully motivated to aggressively participate in the process; and
2. Maximise the impact of the interactive tender process.

The tender process planned for the Project involved extensive interaction and collaboration between Snowy Hydro and the Contractors. This approach was adopted to maximise alignment between Snowy Hydro and the tenderers and

ensure that the tender submissions were optimised through the bid process as far as possible to meet Snowy Hydro's needs.

### 2.6.2 Civil shortlisting

The remaining civil contractors were invited to participate in a shortlisting process which considered a range of relevant factors and contractor capabilities relating to delivery of the Project.

Following the comprehensive and thorough assessment process, the civil tenderers were shortlisted.

## 2.7 E&M technical due diligence

E&M technical due diligence focusing on machine capability specific to Snowy 2.0 duty. The due diligence process is described in detail in *Supporting Chapter Twelve*.

## 2.8 Civil and E&M tender

In parallel, Snowy Hydro initiated a Tender development phase, which involved:

1. Working with the selected contractors to develop the reference design documentation ready for issue;
2. Developing the Employer's Requirements;
3. Agreeing the commercial/contractual framework to work under during the delivery phase; and
4. Tendering of the EWR package.

### 2.8.1 Tender expectations

Tenderers were required to:

1. Enter into an Approvals Process Deed to assist Snowy Hydro in Approvals activities during the tender period (Civil Contractor only);
2. Submit a fully compliant tender and price for the Works as detailed in the tender documents;
3. Include a detailed pricing schedule in line with the Project Work Breakdown Structure (***WBS***) and any guidance provided by Snowy Hydro;
4. Propose detailed alternatives/value improvement opportunities (at their discretion), identifying all points of non-compliance.

See *Supporting Chapter Three* for the commercial and risk expectations set out in the Tender.

The key Employer objectives as stated in the Tender were:

1. Delivering the Project with the objective of zero harm and making safety the highest priority;
2. Delivering the Project in accordance with all the conditions contained within the RFT;
3. Innovation in delivery, resulting in a cost-effective, high-quality and fit-for-purpose asset;
4. Delivery on schedule;

5. Transparently and in consultation with the Employer optimising the tradeoff in design and construction between capital efficiency and ongoing asset life-cycle costs; and
6. Providing certainty of Project outcomes (cost, quality and schedule).

### 2.8.2 Collaboration during the tender

Throughout the tender process, Snowy Hydro and the individual tenderers collaborated in confidential forums designed to clarify the Employer's Requirements and supplied information, share knowledge, expertise and improve the certainty of delivery.

The approach was built around two teams to drive the collaboration: a Steering Team, and a Coordination Team.

The Steering Team was responsible for establishing the principles of collaboration, providing direction to the coordination team on issues they were unable to resolve, and monitoring overall progress.

The Coordination Team was responsible for coordinating day-to-day activities between the Employer and the Tenderer during the tender period. In particular, identifying work activities that require interaction, between the Employer and the Tenderer to clarify the Employer's Requirements and Supplied Information, reference design, Tender submission, alternative options, and any other queries.

A range of workshops was conducted with each of the Civil and E&M tenderers covering:

1. Safety;
2. Equipment performance and design;
3. National Electricity Rules (***NER***) connection requirements;
4. Excavated rock disposal;
5. HR and IR;
6. EIS;
7. Exploratory works;
8. Fire risk;
9. GBR;
10. Power waterway hydraulic performance;
11. Tunnelling;
12. Construction power;
13. Schedule;
14. Cost optimisation opportunities; and
15. Contract risk allocation.

### 2.8.4 Tender evaluation

#### *Overview*

Snowy Hydro is focused on selecting the partners who will most successfully meet the Project objectives and requirements as set out in the tender documents. Accordingly, a purpose-built and rigorous evaluation process was adopted with respect to Tender submissions.

The recommendation to award will be made on the basis of best value for money for Snowy Hydro. Compliance with Snowy Hydro's Employer's Requirements will be assessed, a normalisation process will then be conducted to monetise differences in the bids where possible. The comparative total costs will then be assessed. Price and non-price evaluations will be combined to establish a recommendation to award.

#### *Clarification and negotiation sessions*

As at FID, the initial evaluation of the Civil tenders was complete, and formal clarifications and negotiations with the tenderers are in progress. The negotiations have reached a stage where certainty has been achieved on the capital cost and contract positions underpinning the FID business case. It is proposed that work with the contractors continue into early 2019 to improve Project outcomes and resolve outstanding issues.

## 2.9 Commercial due diligence and probity

A number of owners with similar projects were visited to discuss procurement process approaches. Snowy Hydro also sought advice on contracting strategy from a market leading law firm with deep experience across energy and major infrastructure projects in Australia.

### 2.9.1 Probity assurance

Ensuring high probity standards were applied was identified as a key mitigant for procurement risk. An external probity consultant was appointed to provide an independent risk assessment and health check of the process to date. Their scope is to:

1. Assist in developing and socialising a Probity framework;
2. Provide a Probity risk assessment and health check, including:
    a. Documentation for identifying risks and implementing risk management strategies; and
    b. Reporting for risks, key probity principles, confidentiality, conflict of interest, fairness, and value for money.

After a detailed review of the process and documentation, Snowy Hydro received an independent report from this consultant confirming that the process has been fair and equitable to all tenderers and that no breaches of probity standards were identified.

### 2.9.2 Technical assurance

As noted above, see *Supporting Chapter Twelve* for a description of site visits, model tests and technical assurance undertaken.

## 2.10 Other procurement activities

### 2.10.1 Geotechnical investigation program

A targeted geotechnical investigation was undertaken during the Feasibility Study. Based on the findings, a decision was taken to expand the scope of the geotechnical work, and an extended GIP commenced in October 2017. The outcomes assisted with the refinement of the Project design and enabled the development of the GBR. The GBR is the key tool for allocating risk between Snowy Hydro and the Civil Contractor for the impact of geotechnical conditions on tunnelling costs

See *Supporting Chapter Ten - Site and ground conditions* for discussion of the outcomes of the geotechnical work undertaken to date.

### 2.10.2 Exploratory Works - Roads

As noted in Feasibility, Snowy Hydro identified an opportunity to de-risk the Project through undertaking some exploratory works prior to FID (in addition to the extensive geotechnical investigations underway). These works are primarily civil in nature, involving the development of access roads and work areas, and would be limited to activities that can clearly be characterised as exploratory in nature.

Following a review of timelines, commencement of the exploratory works was scheduled for early 2019 after FID.

As at FID, the EWR bids have been fully evaluated and contract details are being finalised.

See *Supporting Chapter Thirteen* for a detailed discussion of the EWR scope in the broader context of the Exploratory Works.

### 2.10.3 Owner's advisors' procurement

Through the course of the Project to date, Snowy Hydro has sought out a range of advisors to help Snowy Hydro develop the Project and discharge its responsibilities. These advisors bring deep domain knowledge on pumped-hydro. Where possible, Snowy Hydro has conducted a competitive bidding process for the engagement of these advisors. Many of the advisors are specialists globally in very unique fields (eg surge tank design, tunnel fire life safety, hydraulic modelling). In these cases where competitive bidding is not possible, sole source was undertaken.

## 2.11 Status as at FID

As at FID, the opportunity remains for Snowy Hydro to further improve its outcomes from the tender processes by continuing to leverage the competitive tension between tenderers. This work will be carried out in January and February with final contracts expected to be completed by March. The 'not to exceed' cost and contract positions underpinning the business case at FID are locked in with

the tenderers and the continuing negotiation process will only improve Snowy Hydro's outcome from the FID position.

As at FID, the status of each scope procurement area is as follows:

1. **Exploratory Works:**
    a. **Access Roads** - A preferred bidder has been chosen and contract negotiations are being finalised.\(see *Supporting Chapter Thirteen* for scope description);
    b. **Balance of Works** - Snowy Hydro has received and is evaluating tenders for the balance of Exploratory Works (as part of the Main Works - Civil tender);
2. **Geotechnical investigation** - an investigation was initiated by SMEC in Q1-2017 and has continued with since.. Further drilling work will be considered on the basis of the impact on incremental risk reduction to Snowy Hydro;
3. **Main Works**
    a. **Civil works** - Bids have been received and initial tender evaluations complete. Initial price and contractual positions have been reached that underpin the FID business case. Work is continuing with the tenderers to further improve on Snowy Hydro's outcome from the tender submissions;
    b. **E&M Works** - Bids have been received from the tenderers and fully evaluated. A preferred bidder has been appointed and a Heads of Agreement executed. Discussions are in progress to achieve a contract wrap that brings together the Civil and E&M scopes (E&M Contractor appointed as a subcontractor to the Civil Contractor);
4. **Owner's advisors** - Owner's advisors (including Owner's Engineer SMEC) have been progressively engaged since early 2017.

It is anticipated that negotiation on the Main Works packages will be complete and contracts will be ready for execution by the end of March 2019.

## 2.12 Work to conclude for the procurement process

At FID:

1. Final negotiations with the civil tenderers remain to be completed, with further to be realised from the FID business case position;
2. Negotiations to wrap the E&M provider under the Civil EPC contract remain to be concluded; and
3. Negotiations to achieve a novation of the EWR Contractor to the Civil Contractor remain to be completed.

# 3 Regulatory considerations

The Project is subject to Commonwealth and NSW legislation applicable to construction projects. From a procurement and contracting perspective, the two

relevant Acts are the *Australian Jobs Act 2013* (Cth) and NSW Security of Payment legislation as detailed below.[1]

The *Jobs Act* supports the creation of and retention of Australian jobs by requiring public and private major projects (including where creating a new facility) in Australia with a capital expenditure of $500 million or more to prepare and implement an AIP plan.

On the current base case assumptions, the *Jobs Act* will apply to the Project as the proposed Project will exceed the capital expenditure of $500 million, classifying it as a major project given it involves an expansion, improvement or upgrade to an existing generation facility, and as such Snowy Hydro has complied with the requirements of the Act.

Snowy Hydro first engaged with AIP Authority in June 2018. A draft AIP Plan (***AIPP***) has been prepared and Snowy Hydro continues to engage with the AIP Authority with respect to finalising the AIPP.

The objective of Snowy Hydro's AIPP will be to demonstrate how a full, fair and reasonable opportunity will be provided to Australian businesses to supply goods and services during the Project. For example, the AIP Plan will set out:

1. That any contractor engaged will be required to source materials, equipment and people from local markets where the local market has the capability to provide the service and it is economically feasible to do so;
2. That a competitive tender will provide opportunities to local companies to participate in the procurement processes; and
3. Snowy Hydro's detailed expectations for the contractors to comply with the *Jobs Act* and to report their compliance as part of the Employer's Requirements.

The security of payment legislation in NSW consists of two acts: the *Building and Construction Industry Security of Payment Act 1999* (NSW); and the *Contractors Debts Act 1997* (NSW) (largely superseded). The acts generally affect payment terms, including:

1. The payment claim process;
2. The principal's obligation to issue payment schedules;
3. Procedures in respect of withholding and disputed payment claims;
4. Obligations to submit to adjudication; and
5. Entitlement of subcontractors to recover debts.

These requirements will be reflected in the payment terms of the contracts and in contract administration procedures. See Supporting Chapter Fourteen for an account of the constraints this puts on the evaluation of payment claims and the accounts payable process.

In mid-2018, the Commonwealth acquired 100% of the shares in Snowy Hydro, and as a consequence, Snowy Hydro became subject to the *Public Governance Performance and Accountability Act 2013* (**PGPA Act**). However, Snowy Hydro has not been prescribed to be an entity subject to the Commonwealth Procurement Rules under s105B of the PGPA Act and s30 of the PGPA Rules. Accordingly,

[1] See *Supporting Chapter Fourteen* for a discussion of the NSW legislation.

 

while the procurement process described in this chapter has been designed in accordance with best practice and high standards of probity, it has not been designed to strictly comply with the Commonwealth Procurement Rules.

## 5 Definitions and abbreviations

| | |
|---|---|
| AIP | Australian Industry Participation |
| ECC | Early Contractor Consultation |
| EOI | Expression of Interest |
| EPC | Engineer-Procure-Construct |
| EWR | Exploratory Works - Roads |
| FID | Final Investment Decision |
| GBR | Geotechnical Baseline Report |
| GIP | Geotechnical Investigation Program |
| NER | National Electricity Rules |
| PCP | Procurement and Contracting Plan |
| RFI | Request for Information |
| WBS | Work Breakdown Structure |

## 6 Bibliography

There is no bibliography for this chapter.