# Task Dependencies - All Spark Electrical Research & Strategy Project

**Project:** All Spark Electrical Marketing Research & Strategy

**Date:** 14th September 2025

**Execution Mode:** Hybrid (Parallel Research + Sequential Content Development)

## Research Workflow Dependencies

### Phase 1: Foundation Research & Strategic Analysis

**Execution Mode:** Parallel

**Duration:** 2-3 hours

`yaml

phase\_1\_foundation\_research:

type: ParallelExecution

agents:

* brand\_compliance\_auditor
* audience\_intent\_researcher
* brand\_sentiment\_researcher
* brand\_analyst
* competitive\_intelligence\_searcher

success\_criteria:

* SOP compliance verified for electrical services
* Detailed audience personas (3-7) created
* Market conditions analysis completed
* USP and brand SWOT analysis finished
* Competitor SWOT analysis (top 5) completed

### Phase 2: Competitive Intelligence & Search Landscape

**Execution Mode:** Parallel

**Duration:** 2-3 hours

**Dependencies:** [Phase 1 Complete]

`yaml

phase\_2\_competitive\_intelligence:

type: ParallelExecution

dependencies: [phase\_1\_foundation\_research]

agents:

* brand\_strategy\_researcher
* technical\_research\_specialist
* competitor\_analyzer
* seo\_strategist
* competitive\_intelligence\_searcher

success\_criteria:

* Brand positioning analysis completed
* Trending topics research finished
* Content gap analysis identified
* Search landscape analysis completed
* Competitor content audit finished

### Phase 3: Advanced SEO & Keyword Strategy

**Execution Mode:** Parallel

**Duration:** 2-3 hours

**Dependencies:** [Phase 2 Complete]

`yaml

phase\_3\_seo\_keyword\_strategy:

type: ParallelExecution

dependencies: [phase\_2\_competitive\_intelligence]

agents:

* keyword\_researcher
* seo\_strategist
* technical\_research\_specialist

success\_criteria:

* Comprehensive keyword research completed
* Search intent analysis finished
* Keyword gap analysis identified
* Funnel stage keywords mapped
* Untapped opportunities identified
* Emerging trends research completed

### Phase 4: Content Planning, Briefs & AI Optimization

**Execution Mode:** Parallel

**Duration:** 3-4 hours

**Dependencies:** [Phase 3 Complete]

`yaml

phase\_4\_content\_planning:

type: ParallelExecution

dependencies: [phase\_3\_seo\_keyword\_strategy]

agents:

* content\_strategist
* page\_content\_brief\_agent
* ai\_specialist\_agent
* blog\_ideation\_specialist

success\_criteria:

* Detailed content briefs created
* Content structure specifications defined
* AI optimisation completed
* Content ideas generated
* 12-month calendar developed
* Topic clusters mapped

## Content Development Pipeline

### Phase 5: Content Strategy Development

**Execution Mode:** Sequential

**Duration:** 4-5 hours

**Dependencies:** [All Research Phases Complete]

`yaml

content\_strategy\_development:

type: SequentialExecution

dependencies: [phase\_4\_content\_planning]

agents:

* content\_strategist
* content\_generator
* enhanced\_content\_auditor

iterative\_feedback\_loops:

* clarity\_conciseness\_editor
* cognitive\_load\_minimizer
* content\_critique\_specialist
* ai\_text\_naturalizer

success\_criteria:

* Content hubs architecture defined
* Pillar pages strategy created
* Editorial calendar developed
* Content audit completed

## Iterative Feedback Loop Configuration

### Content Optimization Workflow

`yaml

feedback\_loop\_content\_strategy:

type: IterativeImprovement

description: Multi-agent iterative feedback loop for content strategy optimization

dependencies: [content\_strategy\_development]

agent\_sequence:

* clarity\_conciseness\_editor
* cognitive\_load\_minimizer
* content\_critique\_specialist
* ai\_text\_naturalizer

max\_iterations: 3

thresholds:

clarity\_conciseness\_editor: 8/10

cognitive\_load\_minimizer: 7/10

content\_critique\_specialist: 7/10

ai\_text\_naturalizer: 8/10

success\_criteria:

* All agent thresholds met
* Aggregate score ≥8.5/10
* Australian English compliance verified
* Source citations included for all claims

## Quality Gates

### Research Phase Quality Gates

* [ ] **Phase 1 Gate**: Foundation research completeness verified
* [ ] **Phase 2 Gate**: Competitive intelligence data validated
* [ ] **Phase 3 Gate**: SEO strategy alignment confirmed
* [ ] **Phase 4 Gate**: Content planning specifications approved

### Content Development Quality Gates

* [ ] **Content Strategy Gate**: Strategic alignment verified
* [ ] **Feedback Loop Gate**: Iterative improvement thresholds met
* [ ] **Final Review Gate**: Publication readiness confirmed
* [ ] **Australian English Gate**: Language compliance verified

## Risk Mitigation Strategies

### Website Accessibility Risks

* **Risk**: All Spark Electrical website may be inaccessible
* **Mitigation**: Use archived data, competitor analysis for market intelligence
* **Escalation**: Research alternative data sources and industry benchmarks

### Research Data Quality

* **Risk**: Limited local market data for Adelaide electrical services
* **Mitigation**: Expand to South Australian market data, use industry parallels
* **Escalation**: Supplement with national electrical services trends

### Competitive Intelligence Gaps

* **Risk**: Competitor websites may have limited public information
* **Mitigation**: Use multiple data sources, social media analysis, industry reports
* **Escalation**: Focus on publicly available information and market positioning

## Success Metrics

### Research Completeness

* [ ] All 4 research phases completed with documented findings
* [ ] Minimum 5 competitors analysed in detail
* [ ] 500+ relevant keywords identified and categorised
* [ ] 3-7 detailed audience personas developed

### Content Strategy Quality

* [ ] 12-month editorial calendar with 50+ content ideas
* [ ] Content hub architecture with 5+ pillar topics
* [ ] Technical SEO recommendations with implementation priorities
* [ ] AI optimisation strategy for voice search readiness

### Documentation Standards

* [ ] All reports include credible source citations
* [ ] Australian English compliance throughout
* [ ] Professional formatting with navigation structure
* [ ] Implementation timelines and resource requirements included

## Timeline Estimation

### Total Project Duration: 12-16 hours

* **Research Phases (1-4):** 9-13 hours
* **Content Strategy Development:** 3-4 hours
* **Quality Assurance & Documentation:** 2-3 hours

### Parallel Processing Benefits

* **Sequential Approach:** ~20 hours
* **Hybrid Approach:** ~12-16 hours
* **Time Savings:** 20-40% efficiency improvement

This task dependency framework ensures systematic execution of the comprehensive research workflow while maintaining quality standards and efficient resource utilisation.